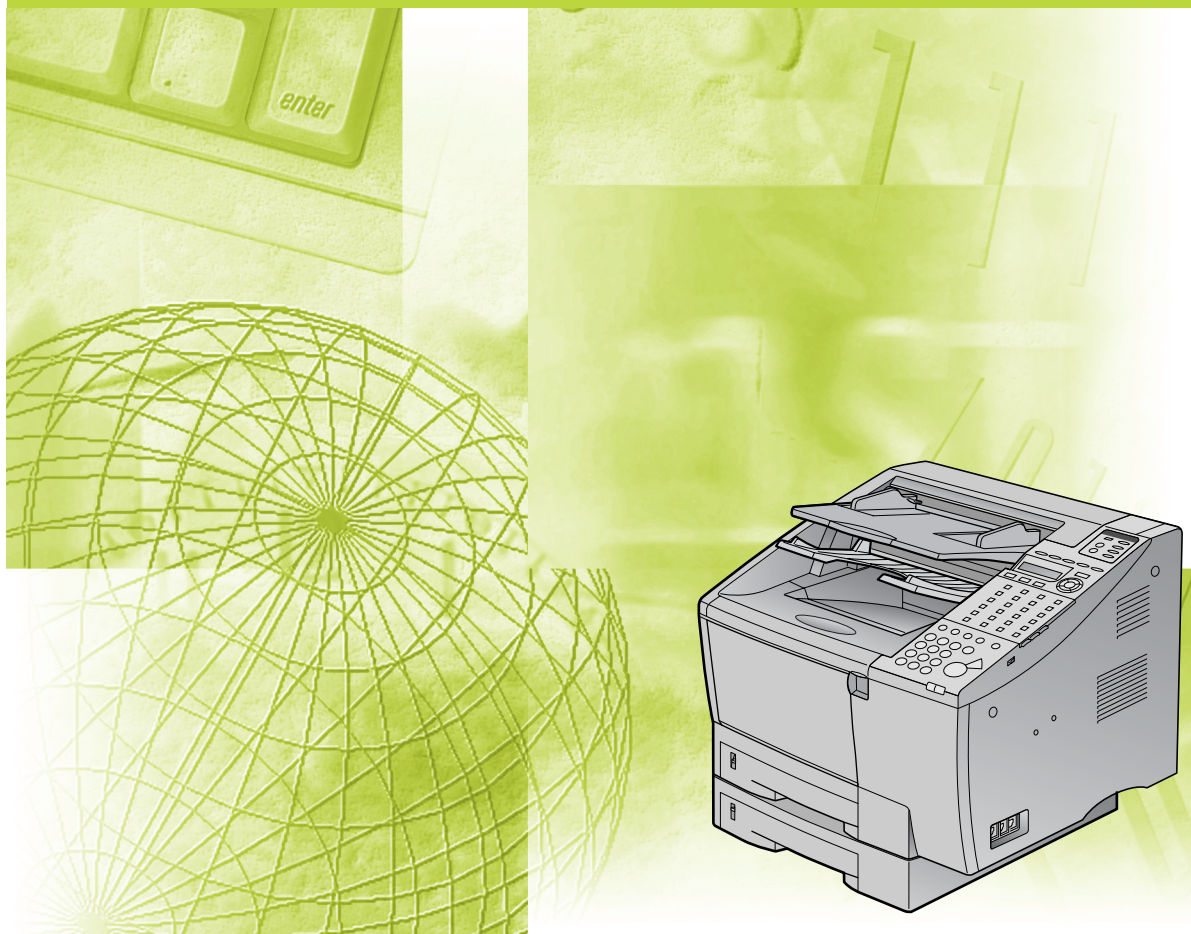


Canon

LASER CLASS® 700 Series

Network Guide



Please read this guide before operating this equipment.
After you finish reading this guide, store it in a safe place for future reference.

ENG

LASER CLASS 700 Series Network Guide

Manuals for the Machine

The manuals for this machine are divided as follows. Please refer to them for detailed information.
The manuals supplied with optional equipment are included in the list below. Depending on the system configuration and product purchased, some manuals may not be needed.



Guides with this symbol are printed manuals.



Guides with this symbol are PDF manuals included on the accompanying CD-ROM.

- **Basic Operations**
- **Troubleshooting**

Reference Guide



- **Sending Instructions**

Sending Guide



- **Fax Instructions**

Facsimile Guide



- **Setting Up the Network Connection and Installing the CD-ROM Software**

Setup Guide



- **Remote User Interface Instructions**

Remote UI Guide



- **Network Connectivity and Setup Instructions**

Network Guide (This Document)



- **PCL Printer Instructions**

PCL Printer Guide



- **PCL Printer Driver Installation and Instructions**

PCL Driver Guide



- **Fax Driver and Cover Sheet Editor Installation and Instructions**

Fax Driver Guide with Cover Sheet Editor





How This Manual Is Organized

Chapter 1 Before You Start

Chapter 2 Using a TCP/IP Network (Windows/UNIX)

Chapter 3 Using a NetWare Network (Windows)

Chapter 4 Using a NetBIOS Network (Windows 95/98/Me)

Chapter 5 Appendix

Includes troubleshooting, network settings, software information, the glossary, and index.

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Preface

Thank you for purchasing the Canon LASER CLASS 700 Series. Please read this manual thoroughly before operating the machine in order to familiarize yourself with its capabilities, and to make the most of its many functions. After reading this manual, store it in a safe place for future reference.

How to Use This Manual

Symbols Used in This Manual

The following symbols are used in this manual to explain procedures, restrictions, handling precautions, and instructions that should be observed for safety.



IMPORTANT

Indicates operational requirements and restrictions. Be sure to read these items carefully in order to operate the machine correctly, and to avoid damage to the machine.



NOTE

Indicates a clarification of an operation, or contains additional explanations for a procedure. Reading these notes is highly recommended.

Keys Used in This Manual

The following symbols and key names are a few examples of how keys to be pressed are expressed in this manual. The operation panel keys on the machine are indicated within brackets.



Press [Start].



Press [Data Registration].

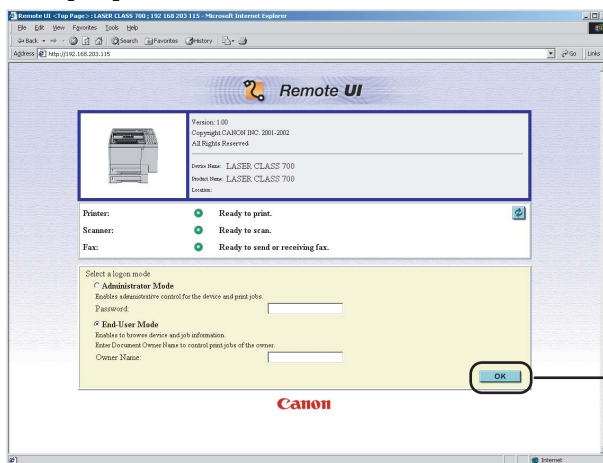
Displays Used in This Manual

Screen shots of computer operation screens used in this manual may differ from the ones you actually see, depending on the model or options that come with your machine.

The keys or buttons which you should press are marked with a , as shown below.

When multiple keys or buttons can be clicked or pressed, they are highlighted and mentioned in the order in which they should be pressed.

1 Click [OK].



Click this button for operation.

Abbreviations Used in This Manual

In this manual, product names and model names are abbreviated as follows:

Microsoft® Windows® 95 operating system:	Windows 95
Microsoft® Windows® 98 operating system:	Windows 98
Microsoft® Windows® Millennium Edition operating system:	Windows Me
Microsoft® Windows NT® operating system:	Windows NT
Microsoft® Windows® 2000 operating system:	Windows 2000
Microsoft® Windows® XP operating system:	Windows XP
Microsoft® Windows® operating System:	Windows
Novell NetWare®:	NetWare

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Before You Start

1

CHAPTER

This chapter describes what you need to know before you start using the machine, including the network system environments the machine is compatible with, and how to check the network system environment you are using.

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System Requirements for Printing	1-2
Checking Your Network Environment	1-4
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System Environment Requirements

This section describes the system environments that your machine is compatible with.

System Requirements for Printing

The following network and system environments are compatible with your machine when printing:

■ Printing Using a TCP/IP Network:

Compatible OS:

- Microsoft Windows 95/98/Me
- Microsoft Windows NT Server 4.0
- Microsoft Windows NT Workstation 4.0
- Microsoft Windows 2000 Server
- Microsoft Windows 2000 Professional
- Microsoft Windows XP
- Solaris Version 1.1x (SunOS Version 4.1x) or later
- Solaris Version 2.5x (SunOS Version 5.5x) or later
- HP-UX Version 10.x or later
- IBM-AIX Version 4.x or later
- Red Hat Linux 6.1 or later

Compatible Computers: Windows 95/98/Me/NT/2000; IBM PC compatible computers

■ Printing Using a NetWare Network:

Compatible Servers: Novell NetWare Version 3.2/4.1/4.11/4.2/5.0/5.1/6.0

Compatible Clients:

- Microsoft Windows 95/98/Me/XP
- Microsoft Windows NT Server 4.0
- Microsoft Windows NT Workstation 4.0
- Microsoft Windows 2000 Server
- Microsoft Windows 2000 Professional

Compatible Computers: IBM PC compatible computers

■ **Printing Using a NetBIOS Network:**

Compatible OS: Microsoft Windows 95/98/Me

Compatible Computers: IBM PC compatible computers

Required Memory for Computers: More than 16 MB



IMPORTANT

If you are using Windows NT, install Service Pack 5 or later.

Checking Your Network Environment

Refer to the following diagram examples to confirm the network environment that is connected to your machine. Then, perform the necessary operations to set up that environment.

Sample Windows Network

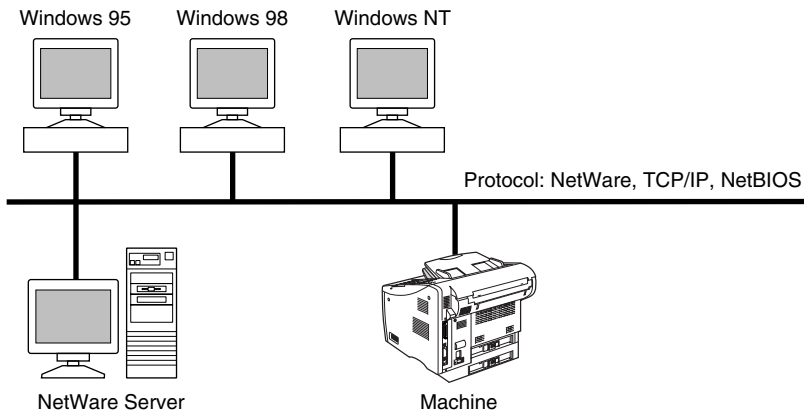
Using a NetWare Server

In a network environment like the one below, a NetWare, TCP/IP, or NetBIOS (NetBIOS over TCP/IP) protocol can be used for printing. Multiple protocols can also be used at the same time.



NOTE

NetBIOS is available only for Windows 95/98/Me.



Depending on the protocol, see the following:

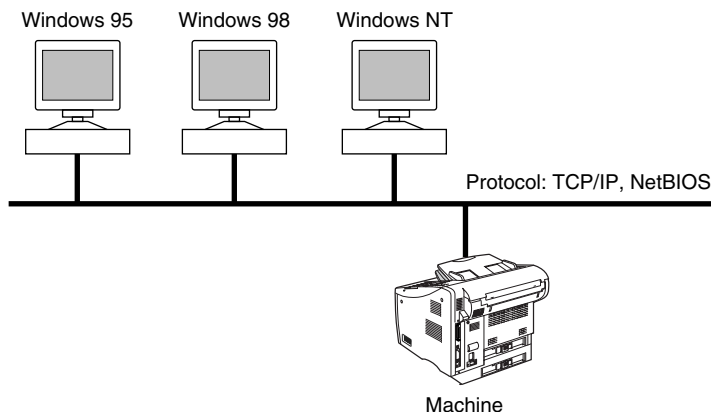
- Chapter 2, "Using a TCP/IP Network (Windows/UNIX)"
- Chapter 3, "Using a NetWare Network (Windows)"
- Chapter 4, "Using a NetBIOS Network (Windows 95/98/Me)"

Without Using a NetWare Server

In a network environment like the one below, either a TCP/IP or NetBIOS (NetBIOS over TCP/IP) protocol can be used for printing. Multiple protocols can also be used at the same time.

NOTE

NetBIOS is available only for Windows 95/98/Me.



Depending on the protocol, see the following:

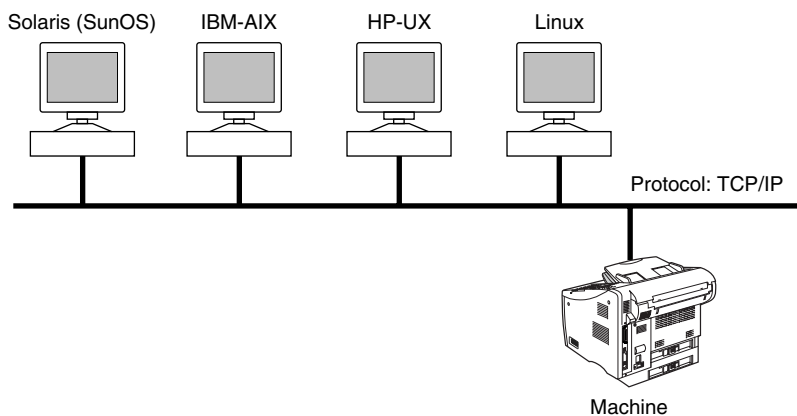
- Chapter 2, "Using a TCP/IP Network (Windows/UNIX)"
- Chapter 4, "Using a NetBIOS Network (Windows 95/98/Me)"

NOTE

- Once you set up the machine as a network printer, each computer can print directly to it. Using the TCP/IP protocol with Windows 2000/XP or Windows NT as a print server provides efficient management of your network printer. For the detailed procedure, see "Print Server Settings," on p. 2-40.
- In a network comprising only of Windows 95/98/Me computers that do not use the TCP/IP protocol, can use the NetBIOS protocol only for connecting to a network and printing. For detailed information, see Chapter 4, "Using a NetBIOS Network (Windows 95/98/Me)."

Sample UNIX Network

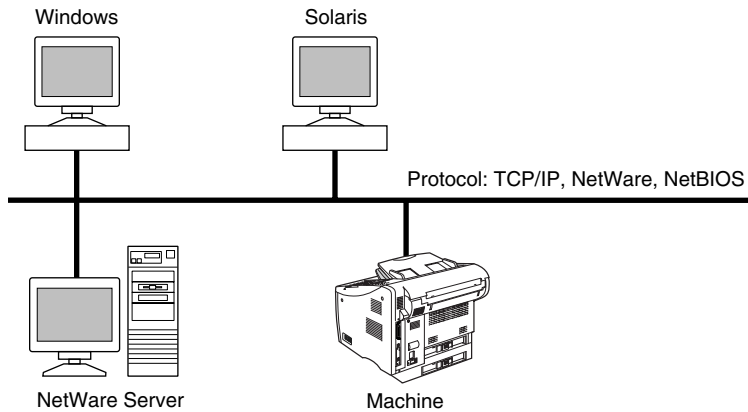
With computers that operate on a UNIX network, the TCP/IP protocol is used. (See Chapter 2, "Using a TCP/IP Network (Windows/UNIX).")



Using a Network with Different Types of Computers

When there are various types of computers on the network, network operations depend on the type of computer being used.

For example, if you are using Windows 98 and UNIX computers, you will need to specify and configure the setup of each computer described in both “Sample Windows Network,” on p. 1-4 and “Sample UNIX Network,” on p. 1-6.



Depending on the protocol, see the following:

- Chapter 2, "Using a TCP/IP Network (Windows/UNIX)"
- Chapter 3, "Using a NetWare Network (Windows)"
- Chapter 4, "Using a NetBIOS Network (Windows 95/98/Me)"

Using a TCP/IP Network (Windows/UNIX)

2

CHAPTER

This chapter describes the settings and procedures necessary to connect and use the machine with a TCP/IP network.

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TCP/IP Network Setup Procedures

To use a TCP/IP network, it is necessary to perform the following procedures.

1

Connect the network cable. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Printer Guide*.)

Connect the network cables in accordance to the directions specified in the *PCL Printer Guide*.

2

Specify the protocol settings. (See “Specifying Protocol Settings,” on p. 2-3.)

Specify the machine's protocol settings using one of the following methods:

- The machine's operation panel (Data Registration menu)
- NetSpot (Canon software provided with the optional Network Kit III)
- A web browser (Remote UI)
- ARP/PING commands
- An FTP Client

3

Specify the computer settings for printing. (See “Setting Up a Computer for Printing,” on p. 2-22.)

Connect each computer you want to use for printing to a TCP/IP network, and install the printer driver software.



IMPORTANT

- It is recommended that the Network Administrator perform steps 1 and 2 above.
- If you are printing using a TCP/IP network, you can use the following print applications:
 - LPD (Line Printer Daemon)
 - FTP (File Transfer Protocol)
 - Raw (Windows 2000/XP only)
 - IPP (Internet Printing Protocol) (Windows 95/98/Me/2000/XP only)
- This machine does not come with printer driver software that can be used for each UNIX platform.
- If you are configuring the basic protocol settings for the first time, use the operation panel on your LASER CLASS 700 Series machine.

Specifying Protocol Settings

Preparation for Protocol Settings

Before you specify the machine's protocol settings, it is necessary to specify the IP address of the machine to enable communication between the machine and your computers. You can use any of the following to specify the settings. Specify the settings using one of the following methods:

- The machine's operation panel (Data Registration menu)
- NetSpot (Canon software provided with the optional Network Kit III)
- The Remote UI
- ARP/PING commands
- An FTP Client



IMPORTANT

- Before you enter the IP address of your machine, contact your Network Administrator to allocate your IP address. Enter the correct IP address to avoid network problems.
- In order to perform the following operations in this section, the machine's MAC address is necessary. To check the MAC address from the printer's operation panel, follow the procedure below to make a test print.
 1. Press [PRT.Message] → [Go] on the operation panel to take the printer offline.
 2. Press [Menu] until <TEST MENU> appears.
 3. Press [Item] until <PRINT EN CONFIG> appears → press [Enter/Cancel].
- Before you perform the following operations in this section, make sure that the machine is connected to a power source, and connected to the network.
- If you are using NetSpot or ARP/PING commands, the following steps directly allocate the IP address of the machine. You can also use DHCP, BOOTP, or RARP to specify the IP address. When the machine is started or reset, it checks whether DHCP, BOOTP, or RARP is being used. Then, the machine allocates the IP address using the first available protocol.
- It is not necessary for you to perform the following operations in this section, if you are using the machine to automatically allocate the IP address. However, if you are reallocating the IP address, or if DHCP, BOOTP, or RARP cannot be used, perform the following operations in this section.

Specifying Network Settings from the Operation Panel

Use the procedures described in this section to specify the following network settings:

- IP Address (automatically or manually)
- Subnet Mask
- Default Gateway
- DNS Server Address
- DNS Dynamic Setting
- Host Name
- Domain Name



IMPORTANT

Specified settings from the operation panel become effective after the machine has been restarted (When you disconnect the power cord, then connect it again).



NOTE

- For specific network settings, contact your Network Administrator.
- Although you may specify the network settings from the operation panel of the machine, it is much easier to specify these settings from the Remote UI. (See "Using a Web Browser (Remote UI)," on p.2-14).

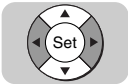


Data
Registration

1 Open all three one-touch speed dialing panels.

2 Press [Data Registration].

```
ADDITIONAL FUNCTIONS
1.PAPER SETTINGS
```



3 Press [▼] or [▲] until <6.SYSTEM SETTINGS> appears → press [Set].

```
ADDITIONAL FUNCTIONS
6.SYSTEM SETTINGS
```

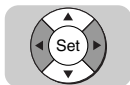
→

```
SYSTEM SETTINGS
1.SYS. ADMIN. INFO
```



IMPORTANT

If the prompt <PASSWORD> is displayed, enter the System Administrator's password using the numeric keys. For information on how to enter the System Administrator's password, see Chapter 4, "Restricting the Use of the Machine," in the *Reference Guide*.

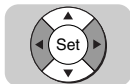


- 4** Press [▼] or [▲] until <4.NETWORK SETTINGS> appears → press [Set].

```
SYSTEM SETTINGS
4.NETWORK SETTINGS
```

→

```
NETWORK SETTINGS
1.IP ADDRESS AUTO.
```

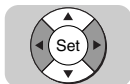


- 5** Press [▼] or [▲] until <1.IP ADDRESS AUTO.> appears → press [Set].

```
NETWORK SETTINGS
1.IP ADDRESS AUTO.
```

→

```
IP ADDRESS AUTO.
FIXED
```



- 6** Press [▼] or [▲] to select <AUTO> or <FIXED> → press [Set].

If you select <FIXED>, proceed to step 8.

If you select <AUTO>, proceed to step 7.

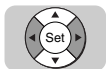
```
IP ADDRESS AUTO.
AUTO
```

→

```
AUTO
1.DHCP
```

- 7** If you selected <AUTO> in step 6, set <DHCP>, <BOOTP>, or <RARP> to 'ON' or 'OFF'.

- If you want to set DHCP to 'ON' or 'OFF':

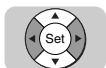


- ☐ Press [▼] or [▲] until <1.DHCP> appears → press [Set].

```
AUTO
1.DHCP
```

→

```
DHCP
OFF
```



- ☐ Press [▼] or [▲] to select <ON> or <OFF> → press [Set].

```
DHCP
```

ON

→

```
AUTO
2.BOOTP
```

The selected mode is set.

● If you want to set BOOTP to 'ON' or 'OFF':

- Press [▼] or [▲] until <2.BOOTP> appears → press [Set].

AUTO
2.BOOTP → BOOTP OFF

- Press [▼] or [▲] to select <ON> or <OFF> → press [Set].

BOOTP ON → AUTO
3.RARP

The selected mode is set.

● If you want to set RARP to 'ON' or 'OFF':

- Press [▼] or [▲] until <3.RARP> appears → press [Set].

AUTO
3.RARP → RARP OFF

- Press [▼] or [▲] to select <ON> or <OFF> → press [Set].

RARP ON → NETWORK SETTINGS
2.IP ADDRESS

The selected mode is set.

To continue specifying network settings, proceed to step 9.

8 If you selected <FIXED> in step 6, set <IP ADDRESS>, <SUBNET MASK>, and <DEFAULT GATEWAY>.

● To specify the IP address:

- Press [▼] or [▲] until <2.IP ADDRESS> appears → press [Set].

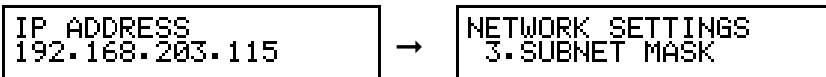
NETWORK SETTINGS
2.IP ADDRESS → IP ADDRESS
0. 0. 0. 0



- ❑ Enter the IP address of the machine using the numeric keys → press [Set].

Enter a series of four numbers, delimited by periods (.) from 0 to 255.

Example: 192.168.203.115

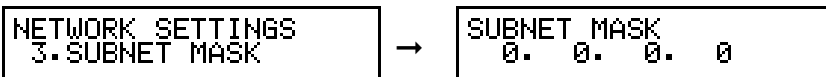


The message <DATA ENTRY OK> appears on the LCD display for a few seconds.

● To specify the subnet mask:



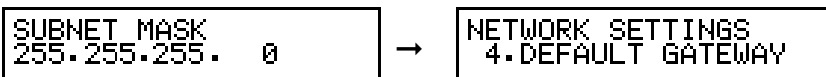
- ❑ Press [▼] or [▲] until <3.SUBNET MASK> appears → press [Set].



- ❑ Enter the subnet mask using the numeric keys → press [Set].

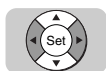
Enter a series of four numbers, delimited by periods (.).

Example: 255.255.255.0

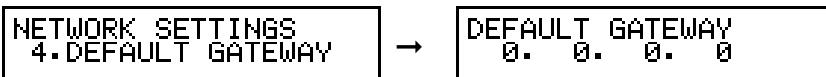


The message <DATA ENTRY OK> appears on the LCD display for a few seconds.

● To specify the default gateway:

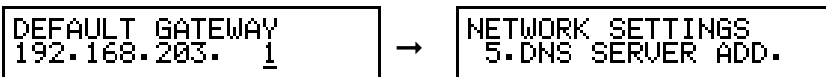


- ❑ Press [▼] or [▲] until <4.DEFAULT GATEWAY> appears → press [Set].



- ❑ Enter the default gateway address using the numeric keys → press [Set].

Enter a series of four numbers, delimited by periods (.).

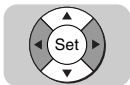


The message <DATA ENTRY OK> appears on the LCD display for a few seconds.



**NOTE**

- You can delete the number you entered by pressing **Ⓢ** (Clear).
- If an address or number has previously been entered, press **Ⓢ** (Clear) before you enter a new number.
- You can move the cursor by pressing [**◀**] or [**▶**].



- 9** Press [**▼**] or [**▲**] until <5.DNS SERVER ADD.> appears → press [**Set**].

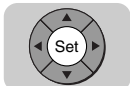
NETWORK SETTINGS 5.DNS SERVER ADD.	→	DNS SERVER ADD. 0. 0. 0. 0
---------------------------------------	---	-------------------------------



- 10** Enter the DNS server address using the numeric keys → press [**Set**].

Enter a series of four numbers, delimited by periods (.).

Example: 192.168.1.0

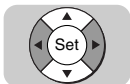


DNS SERVER ADD. 192.168. 1. 0	→	NETWORK SETTINGS 6.DNS DYNAMIC SET
----------------------------------	---	---------------------------------------

The message <DATA ENTRY OK> appears on the LCD display for a few seconds.

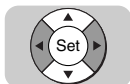
**NOTE**

- You can delete the number you entered by pressing **Ⓢ** (Clear).
- If an address or number has previously been entered, press **Ⓢ** (Clear) before you enter a new number.
- You can move the cursor by pressing [**◀**] or [**▶**].



- 11** Press [**▼**] or [**▲**] until <6.DNS DYNAMIC SET> appears → press [**Set**].

NETWORK SETTINGS 6.DNS DYNAMIC SET	→	DNS DYNAMIC SET OFF
---------------------------------------	---	------------------------



12 Press [▼] or [▲] to select <OFF> or <ON> → press [Set].

If you select <ON>, the DNS server address will update automatically,

DNS DYNAMIC SET ON	→	NETWORK SETTINGS 7.HOST NAME
-----------------------	---	---------------------------------

The selected mode is set.



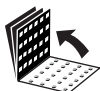
13 Press [Stop] to return to the Standby mode.

Setting the Host Name

Follow the procedure below to specify the host name of your machine.

NOTE

It is much easier to enter the host name from the Remote UI. (See “Using a Web Browser (Remote UI),” on p. 2-14.)

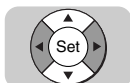


1 Open all three one-touch speed dialing panels.



2 Press [Data Registration].

ADDITIONAL FUNCTIONS 1.PAPER SETTINGS
--



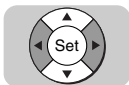
3 Press [▼] or [▲] until <6.SYSTEM SETTINGS> appears → press [Set].

ADDITIONAL FUNCTIONS 6.SYSTEM SETTINGS	→	SYSTEM SETTINGS 1.SYS. ADMIN. INFO
---	---	---------------------------------------



IMPORTANT

If the prompt <PASSWORD> is displayed, enter the System Administrator's password using the numeric keys. For information on how to enter the System Administrator's password, see Chapter 4, “Restricting the Use of the Machine,” in the *Reference Guide*.

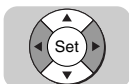


- 4** Press [▼] or [▲] until <4.NETWORK SETTINGS> appears → press [Set].

SYSTEM SETTINGS
4.NETWORK SETTINGS



NETWORK SETTINGS
1.IP ADDRESS AUTO.



- 5** Press [▼] or [▲] until <7.HOST NAME> appears → press [Set].

NETWORK SETTINGS
7.HOST NAME



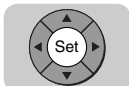
_:A



- 6** Enter the host name using the numeric keys → press [Set].

Press (*) to change the entry mode according to the characters you need to enter. For more information on entering characters, see Chapter 2, “Getting Started,” in the *Reference Guide*.

Example: hostname



hostname :A



NETWORK SETTINGS
8.DOMAIN NAME

The message <DATA ENTRY OK> appears on the LCD display for a few seconds.



NOTE

You cannot enter any symbols, except for a “-” (hyphen) for the host name.

Setting the Domain Name

Follow the procedure below to specify the domain name of your machine.



NOTE

It is much easier to enter the domain name from the Remote UI. (See “Using a Web Browser (Remote UI),” on p. 2-14.)



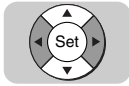
- 1** Open all three one-touch speed dialing panels.

2 Press [Data Registration].

```

ADDITIONAL FUNCTIONS
1.PAPER SETTINGS

```

**3 Press [▼] or [▲] until <6.SYSTEM SETTINGS> appears → press [Set].**

```

ADDITIONAL FUNCTIONS
6.SYSTEM SETTINGS

```



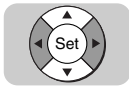
```

SYSTEM SETTINGS
1.SYS. ADMIN. INFO

```

**IMPORTANT**

If the prompt <PASSWORD> is displayed, enter the System Administrator's password using the numeric keys. For information on how to enter the System Administrator's password, see Chapter 4, "Restricting the Use of the Machine," in the *Reference Guide*.

**4 Press [▼] or [▲] until <4.NETWORK SETTINGS> appears → press [Set].**

```

SYSTEM SETTINGS
4.NETWORK SETTINGS

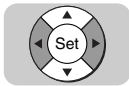
```



```

NETWORK SETTINGS
1.IP ADDRESS AUTO.

```

**5 Press [▼] or [▲] until <8.DOMAIN NAME> appears → press [Set].**

```

NETWORK SETTINGS
8.DOMAIN NAME

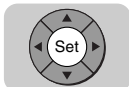
```



```

_ :A

```

**6 Enter the domain name using the numeric keys → press [Set].**

Press (*) to change the entry mode according to the characters you need to enter. For more information on entering characters, see Chapter 2, "Getting Started," in the *Reference Guide*.

Example: organization

```

organization_ :A

```



```

NETWORK SETTINGS
9.VIEW IP ADDRESS

```

The message <DATA ENTRY OK> appears on the LCD display for a few seconds.

**NOTE**

You cannot enter any symbols, except for a “-” (hyphen) and a “.” (period) for the domain name. Also, you cannot place a period at the end of the domain name.

Stop**7 Press [Stop] to return to the Standby mode.*****Checking the Current Network Settings***

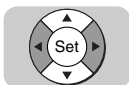
You can check and verify the network settings of your machine by using the machine’s operation panel.

**IMPORTANT**

Specified settings from the operation panel become effective after the machine has been restarted.

**1 Open all three one-touch speed dialing panels.****2 Press [Data Registration].**

```
ADDITIONAL FUNCTIONS
1.PAPER SETTINGS
```

**3 Press [▼] or [▲] until <6.SYSTEM SETTINGS> appears → press [Set].**

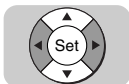
```
ADDITIONAL FUNCTIONS
6.SYSTEM SETTINGS
```



```
SYSTEM SETTINGS
1.SYS. ADMIN. INFO
```

**IMPORTANT**

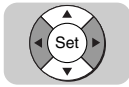
If the prompt <PASSWORD> is displayed, enter the System Administrator’s password using the numeric keys. For information on how to enter the System Administrator’s password, see Chapter 4, “Restricting the Use of the Machine,” in the *Reference Guide*.

**4 Press [▼] or [▲] until <4.NETWORK SETTINGS> appears → press [Set].**

```
SYSTEM SETTINGS
4.NETWORK SETTINGS
```



```
NETWORK SETTINGS
1.IP ADDRESS AUTO.
```

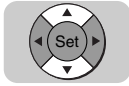


- 5** Press [▼] or [▲] until <9.VIEW IP ADDRESS> appears → press [Set].

```
NETWORK SETTINGS
9.VIEW IP ADDRESS
```

→

```
IP ADDRESS
192.168.203.115
```



- 6** Press [▼] or [▲] to scroll through the settings you want to check.

Each time you press [▼] or [▲], the specified IP Address, Subnet Mask, Default Gateway, DNS Server Address, Host Name, and Domain Name are displayed in sequence.

You can return to the NETWORK SETTINGS menu by pressing  (Set).

```
SUBNET MASK
255.255.255. 0
```



NOTE

You can also check the current network settings by printing a User's Data List. For instructions on how to print the User's Data List and for an output sample, see Chapter 12, "Printing Lists and Reports," in the *Facsimile Guide*.

Using NetSpot

Instead of using the operation panel of your machine, you can install NetSpot from the CD-ROM provided with the optional Network Kit III, and use it to specify the protocol settings on the computer you are using.

For instructions on how to install NetSpot and how to specify the protocol settings using NetSpot, see the *NetSpot Quick Start Guide*.



NOTE

The *NetSpot Quick Start Guide* is an online manual included on the accompanying CD-ROM provided with the optional Network Kit III. You can use Adobe Acrobat Reader to display and printout the guide for your convenience.

Using a Web Browser (Remote UI)

Instead of using the operation panel of your machine, or NetSpot, you can use a web browser (Remote UI) to specify the protocol settings.



NOTE

If you change the IP address from the Remote UI, the change will not be reflected on the display of your machine. You can confirm the change of the IP address by selecting <VIEW IP ADDRESS> from the NETWORK SETTINGS menu, or by printing the User's Data List.

1 Start the web browser → enter the URL below in [Location] or [Address] → press [ENTER] on the keyboard.

`http://<machine host name or IP address >/`

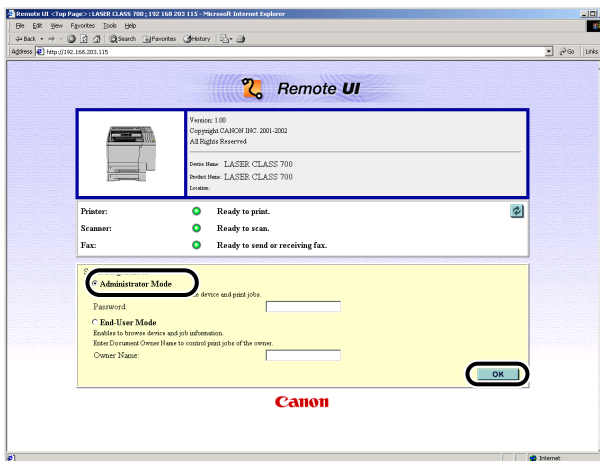
Input Example: `http://192.168.203.115/`



IMPORTANT

- Make sure you are using Netscape Navigator/Communicator 4.04 or later, or Internet Explorer 4.01 SP1 or later for your web browser.
- You cannot set this machine's protocol settings through Netscape Communicator 4.08 with Turbolinux 4.0. You have to use a different version or web browser.
- If you are using a connection via a proxy server, follow these directions: (The settings may differ depending on the network environment.)
 - When configuring your web browser to use the proxy server, add the IP address of the machine to "Exception" (the address not using the proxy server).
 - Set up the web browser to accept cookies.
- If more than one Remote UI is running at the same time, only the last setting specified will be valid. It is recommended that only one Remote UI run at a time.

2 Select [Administrator Mode] → click [OK].



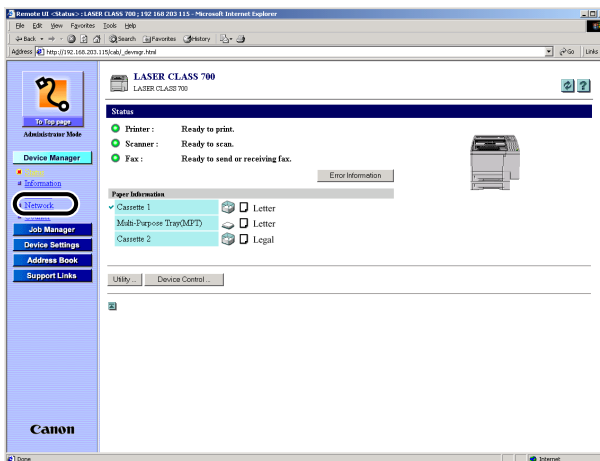
The Remote UI starts, and you can specify settings.



NOTE

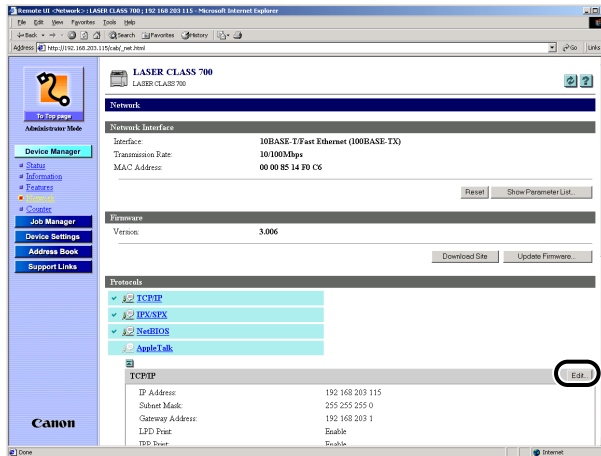
If a password has been set for the machine, enter the password → click [OK].

3 Under [Device Manager] in the left column of the screen, click [Network].



The Network page is displayed.

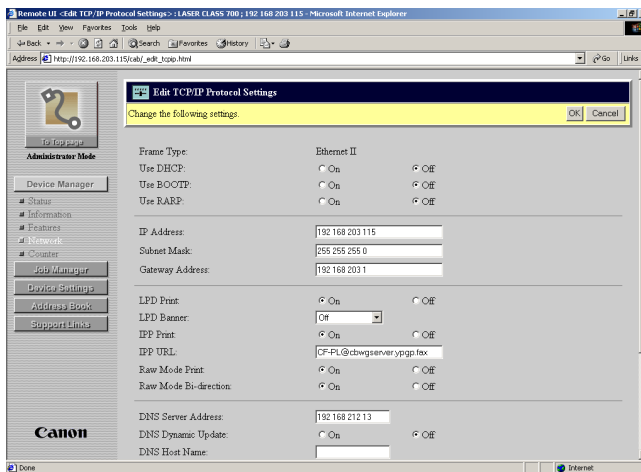
4 Under the Protocols heading, click [Edit] at the right of the TCP/IP protocol box.



Scroll down if TCP/IP protocol box is not visible.

The Edit TCP/IP Protocol Settings page is displayed.

5 Specify the setting method for allocating the IP address of your machine.



To use [Use DHCP], [Use BOOTP], or [Use RARP] for allocating the IP address, click the [On] radio button next to each selection.

If you select [Off] for [Use DHCP], [Use BOOTP], or [Use RARP], the machine will not check for these protocols.

If neither DHCP, BOOTP, nor RARP can be used, specify the IP address in the [IP Address] text box. The IP address specified here, is the one allocated.

**IMPORTANT**

This machine enables you to have the machine directly allocate an IP address, or you can use DHCP, BOOTP, or RARP to specify the IP address. When the machine is started or reset, it checks whether DHCP, BOOTP, or RARP is being used, and then allocates the IP address using the first available protocol.

**NOTE**

- It takes about one to two minutes for the machine to check whether DHCP, BOOTP or RARP can be used. It is recommended that you set unused protocols to 'Off'.
- Depending on whether you use DHCP, BOOTP, or RARP to allocate the IP address, you need to start the DHCP server, BOOTP daemon, or RARP daemon.

6**Specify the IP Address, Subnet Mask, and Gateway Address.**

In [IP Address], enter the machine's IP address. In [Subnet Mask] and [Gateway Address], enter the subnet mask and gateway address used by the TCP/IP network.

**NOTE**

If you are using DHCP, BOOTP, or RARP, some of the items above are not used. The values obtained from DHCP, BOOTP, or RARP are listed in the respective text boxes automatically.

7**Specify the LPD settings.**

- **For [LPD Print]:**

- ☐ Select [On] or [Off].

- **For [LPD Banner]:**

- ☐ Select whether to enable or disable the banner page (the separator page of each print job).

[Off]: The banner page is always disabled, regardless of the banner page output settings.

[Auto]: The banner page is enabled only for print jobs set to output a banner page, and disabled for print jobs not set to output a banner page.

[On (Print Last)]: The banner page is always enabled, regardless of the banner page output settings. The banner page is output on the last page.

**NOTE**

Depending on the operating system or LPR (Line Printer Remote) being used, it may not be possible to specify the banner page output settings. If this occurs, you can specify the settings for banner page output by selecting any option other than [Auto].

8

For [IPP Print], [IPP URL], [Raw Mode Print], and [Raw Mode Bi-direction], specify the IPP (Internet Printing Protocol) and Raw settings.

Usually, there is no need to make changes.

9

If you are using DNS, specify the DNS settings.

- ☐ Enter the IP address of the DNS server in [DNS Server Address].
- ☐ Select [On] or [Off] for [DNS Dynamic Update] if you want the DNS server address information to update automatically.
- ☐ Enter the host name of the machine in [DNS Host Name].

Input Example: sales_printer

- ☐ Enter the domain name belonging to the machine in [DNS Domain Name].

Input Example: sales_dept.xyz_company.co.jp

**NOTE**

- The machine uses DNS (Domain Name System) when the DNS dynamic update function is set to 'On' in step 10).
- The DNS dynamic update function automatically registers the names specified in [DNS Host Name] and [DNS Domain Name] in the DNS server for the machine.
- You can use this function in an environment with a DNS server that can perform dynamic registration (dynamic DNS server).
- If using LPR to specify the DNS Host Name and DNS Domain Name settings, you can use the machine without specifying the IP address of the machine.

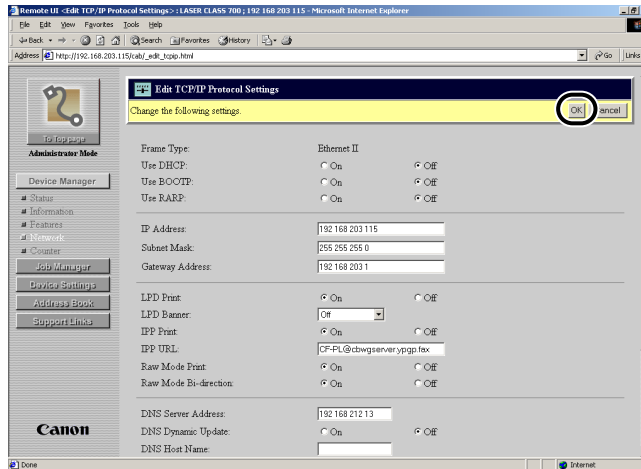
10

In [SNMP Access] and [SNMP Community String], specify the SNMP (Simple Network Management Protocol) settings.

[SNMP Access]: Select [On] or [Off] to enable SNMP operation.

[SNMP Community String]: Enter [public], [canon_admin], or [canon_user] to define the community you want to belong to.

11 Click [OK].



The settings become valid after you reset the print server or restart the machine.

To reset the print server, under [Device Manager], on the left column of the screen, select [Network] → click [Reset].

The protocol settings are complete.

Using ARP/PING Commands

Instead of using the operation panel of your machine, NetSpot, or the Remote UI, you can use ARP/PING commands to specify the protocol settings.

1 Start up the MS-DOS prompt or the Command prompt.

If you are using UNIX, display the Console screen, and then log on as a superuser.

2 Execute the following command to add a static entry to the arp table.

arp -s <IP Address> <MAC Address>

IP Address: Specify the IP address you want to allocate to the machine.
The IP address consists of four numbers delimited by periods, ranging from 0 to 255.

MAC Address: Specify the MAC Address of the machine. Every second digit is separated by “-” (“:” for UNIX).

Input Example (Windows): `arp -s 172.20.88.125 00-00-85-05-70-31`

Input Example (UNIX): `arp -s 172.20.88.125 00:00:85:05:70:31`



NOTE

- If you are using IBM-AIX, enter "arp -s ether <IP Address> <MAC Address>."
- Note that in IBM-AIX language, the word “ether” means Ethernet.

3 Execute the applicable command below to set the IP address for the network board.

`ping <IP Address> -l 479` (for Windows)

`ping -s <IP Address> 479` (for Solaris 1.x/2.x)

`ping <IP Address> 479` (for IBM-AIX)

`ping <IP Address> 487` (for HP-UX)

`ping -s 479 <IP Address>` (for Red Hat Linux)

`ping -s 480 <IP Address>` (for Turbolinux)

IP Address: Specify the same IP address that you specified in step 2 above.

Input Example (Windows): `ping 172.20.88.125 -l 479`



NOTE

- The term “-l” above is not “1” (one), but is the small letter of “L”.
- To set the subnet mask and gateway address, you must use an FTP Client. For details on the procedure, proceed to step 1 in “Using an FTP Client,” on p. 2-43.

Using an FTP Client

You can use an FTP Client to specify the subnet mask and gateway address.

1 Start up the MS-DOS prompt or the Command prompt.

If you are using UNIX, display the Console screen, and then log on as a superuser.

2 Execute the following command.

`ftp <machine's IP address>`

3 Enter “root” as the user name.

- If a password has been set for the machine:

- ☐ Enter the password for the machine → press [ENTER] on the keyboard.

- If no password has been set:

- ☐ Press [ENTER] on the keyboard without entering a password.



NOTE

- You can log on using a user name other than “root” (blank, etc.). However, you can only view the config file, but cannot overwrite it.
- You cannot log on as “Anonymous.”

4 Execute the following command to download the config (configuration) file.

```
get config
```

5 Edit the downloaded config file using Notepad (or similar program).

For an explanation of each item, see “Overview of Network Setting Items,” on p. 5-7.

6 Execute the following command to upload the config file.

```
put config CONFIG
```

7 To confirm the settings, execute the following command to reset the print server.

```
get reset
```

You can also confirm that the settings are valid by restarting the machine.

The protocol settings are complete.

Setting Up a Computer for Printing

After you have completed the protocol settings of the machine, you are ready to set up each computer on the network for printing.

Connecting to a TCP/IP Network

All computers that use the printer must have TCP/IP client software installed and must be enabled for TCP/IP network use. For details, see the manuals provided with the operating system.

Installing the Printer Driver and Specifying the Printer's Location

NetSpot is software for specifying printer and network settings. To print from a computer, you must install a printer driver and specify the printer's location. The printer's location may differ depending on the print application used for printing. Use the following information as a guide to determine the print application you are using, and then perform the necessary operations.

- **LPD (Line Printer Daemon)**

LPD is the print application generally used with TCP/IP. See "Printer Connection Method (LPD/Raw)," on p. 2-23 to install the printer driver and specify the printer's location setting.

- **Raw**

Raw is a print application used with Windows 2000/XP. It can print at higher speeds than LPD. See "Printer Connection Method (LPD/Raw)," on p. 2-23 to install the printer driver and specify the printer's location setting.

- **IPP (Internet Printing Protocol)**

IPP is a print application that can be used with Windows 95/98/Me/2000/XP. It uses the HTTP (Hypertext Transfer Protocol) to print using Internet/intranet connections. See "Printer Connection Method (IPP)," on p. 2-37 to install the printer driver and specify the printer's location setting.

- **FTP (File Transfer Protocol)**

FTP is a print application that prints files by copying them to the printer using FTP client software. For details, see "Printer Management," on p. 2-42.



IMPORTANT

If you are printing with IPP, the [Pause Printing and Cancel All Documents] settings on the Printer menu in the Windows print queue cannot be used. (To view the print queue, on the taskbar, click [Start] → point to [Settings] → click [Printers] → double-click the icon of the machine.)



NOTE

Configuring Windows 2000/XP or Windows NT as a print server provides efficient management of your network printer. For the detailed procedure, see “Print Server Settings,” on p. 2-40.

Printer Connection Method (LPD/Raw)

To print from a computer using LPD or Raw print applications, you must install a printer driver and specify the printer's location. Follow the procedure below to install the printer driver, select the printer port settings, and specify the printer's location (Network or Local).

Windows 95/98/Me

1 Install the printer driver. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Driver Guide*.)

When the dialog box for selecting the printer's location appears, select [Local printer]. Do not select [Network printer].

The port selection can be changed after installation. You can select any port, such as [LPT1].

2 Install the LPR Port Utility from the CD-ROM supplied with the optional Network Kit III.

- ☐ Insert the CD-ROM supplied with the optional Network Kit III into the CD-ROM drive.
- ☐ Double-click the [My Computer] icon.
- ☐ Right click the CD-ROM drive icon → click [Open] on the pop-up menu.
- ☐ Double-click the [Lprport] folder.
- ☐ Double-click the [Setup.exe] icon.

The Install program starts.

- ☐ Follow the on screen instructions to install the LPR Port Utility.

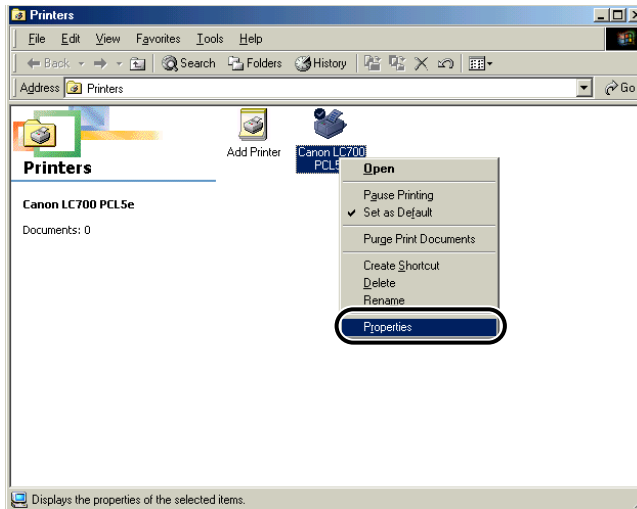


IMPORTANT

Depending on your system environment, the CD-ROM menu may automatically be displayed after you insert the CD-ROM into the CD-ROM drive. In this case, click [Finish] → proceed to step 3.

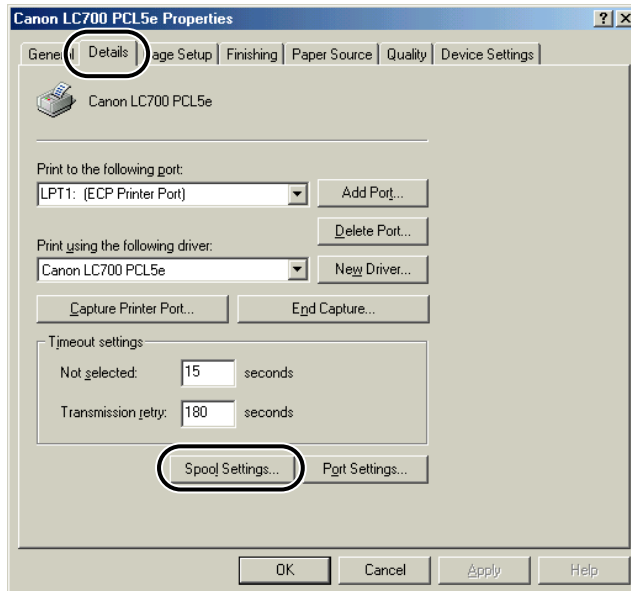
3 Open the printer's Properties dialog box.

- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Right click the printer icon of the printer you installed in step 1.
- ☐ On the pop-up menu, click [Properties].

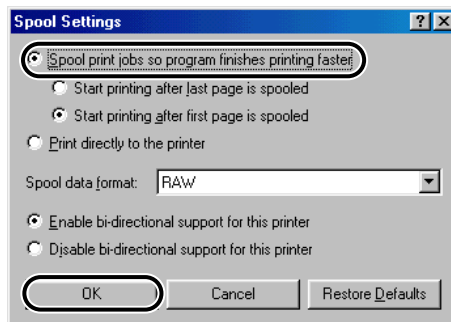


4 Specify the Spool settings.

- ☐ Click the [Details] tab to display the [Details] sheet.
- ☐ Click [Spool Settings] to open the [Spool Settings] dialog box.

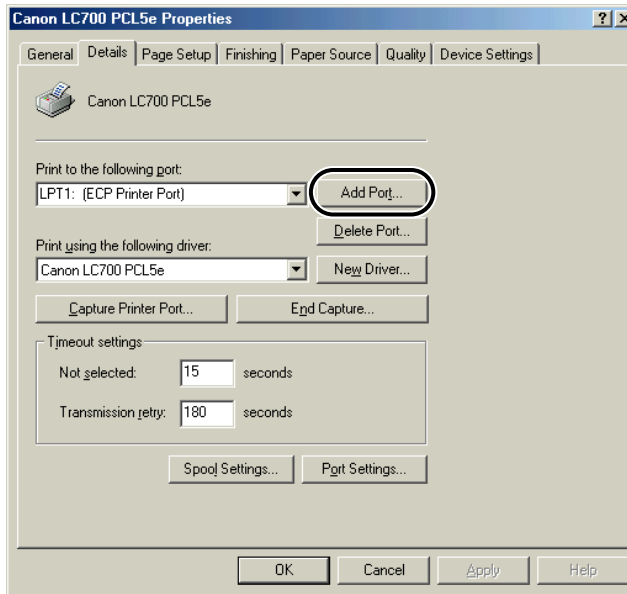


- ☐ Select [Spool print jobs so program finishes printing faster].
- ☐ Click [OK].

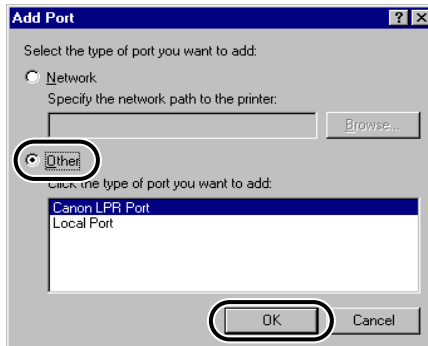


5 Specify the port settings.

- ❑ Click [Add Port] to open the [Add Port] dialog box.

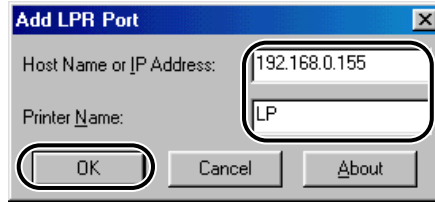


- ❑ Select [Other].



- ❑ Under [Click the type of port you want to add], select [Canon LPR Port] → click [OK].
The [Add LPR Port] dialog box opens.

- ☐ Enter the host name or IP address of the printer in [Host Name or IP Address].
- ☐ Enter “LP” in [Printer Name] → click [OK].



IMPORTANT

Before setting the port, check that the machine is connected to the network, and that the machine is connected to a power source.

6 Click [OK] to enable the settings.

The printer driver and location settings are complete.

Windows 2000/XP

1 Install the printer driver. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Driver Guide*.)

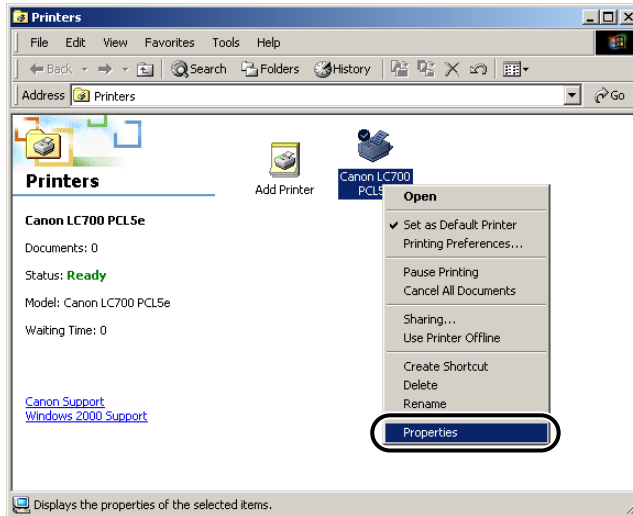
When the dialog box for selecting the type of printer appears, select [Local printer] → [Automatically detect and install my Plug and Play printer]. Do not select [Network printer].

The port selection can be changed after installation. You can select any port, such as [LPT1].

2 Open the printer's Properties dialog box.

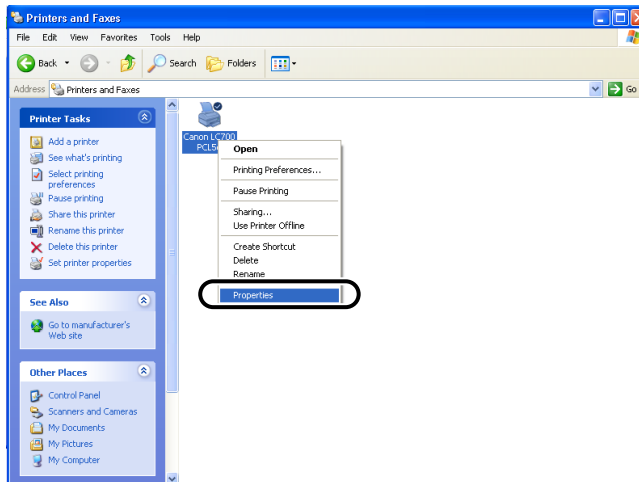
● If you are using Windows 2000:

- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Right click the printer icon of the printer you installed in step 1.
- ☐ On the pop-up menu, click [Properties].



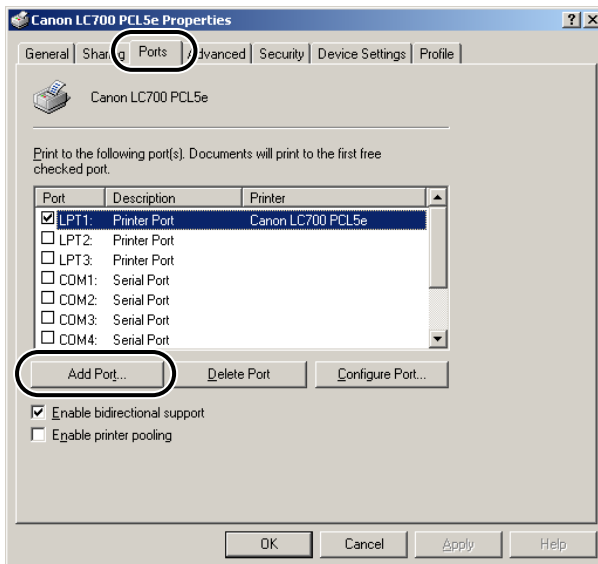
● If you are using Windows XP:

- ☐ On the taskbar, click [Start] → click [Printers and Faxes].
- ☐ Right click the printer icon of the printer you installed in step 1.
- ☐ On the pop-up menu, click [Properties].

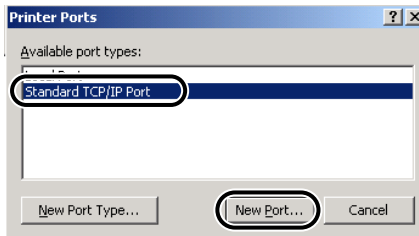


3 Specify the port settings.

- ☐ Click the [Ports] tab to display the [Ports] sheet.
- ☐ Click [Add Port] to open the [Printer Ports] dialog box.



- ☐ From [Available port types], select [Standard TCP/IP Port] → click [New Port].



The Add Standard TCP/IP Printer Port Wizard starts.

- ☐ Click [Next].
- ☐ In [Printer Name or IP Address], enter the printer's IP address or host name → click [Next].

After the computer has confirmed that there is a printer at the IP address you entered, the Completing the Add Standard TCP/IP Printer Port Wizard window appears.

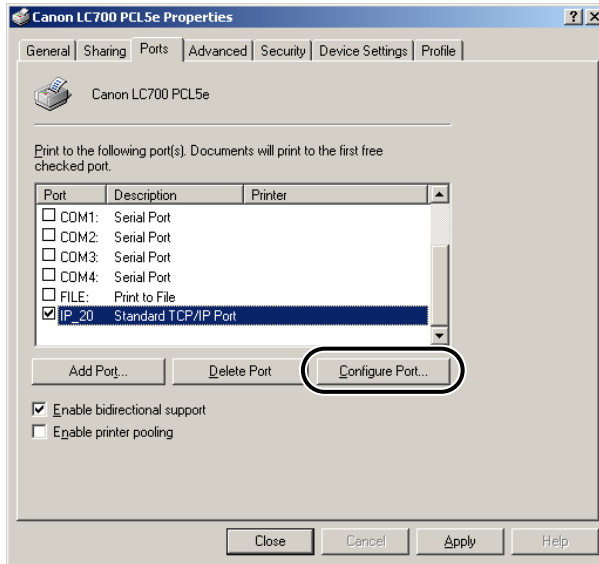
If the dialog box displays <Additional Port Information Required>, follow the instructions on the screen to search again, or select [Standard-Canon Network Printing Device with P9100] from the Device Type drop-down list → click [Next] to exit the Wizard.

- ☐ Click [Finish].
- ☐ Click [Close] to close the [Printer Ports] dialog box.

4 If you want to use Raw, change the port configuration information.

If you are using LPR, this step is not required.

- ☐ Click [Configure Port].



- ❑ Select [Raw] under [Protocol] → enter the port number under the [Raw Settings] → click [OK].

The screenshot shows the 'Configure Standard TCP/IP Port Monitor' dialog box. The 'Port Settings' tab is selected. The 'Port Name' field contains 'IP20'. The 'Printer Name or IP Address' field contains '192.168.203.115'. Under the 'Protocol' section, the 'Raw' radio button is selected. In the 'Raw Settings' section, the 'Port Number' field contains '9100'. The 'LPR Settings' section includes a 'Queue Name' field, an unchecked checkbox for 'LPR Byte Counting Enabled', and an unchecked checkbox for 'SNMP Status Enabled'. Below these, the 'Community Name' field contains 'public' and the 'SNMP Device Index' field contains '1'. At the bottom right, the 'OK' button is circled, and the 'Cancel' button is next to it.

5 Click [OK] to enable the settings.

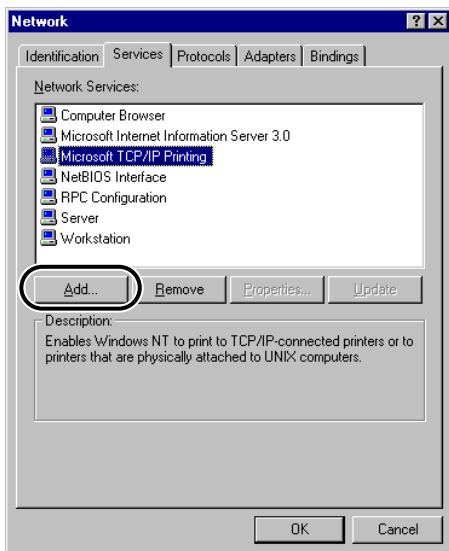
The printer driver and location settings are complete.

1 Check that [Microsoft Windows TCP/IP Printing] is installed.

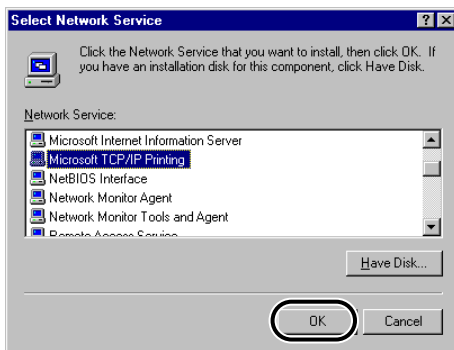
- ☐ Right click the [Network Neighborhood] icon on the screen → click [Properties].
- ☐ Click the [Services] tab to display the [Services] sheet.
If [Microsoft TCP/IP Printing] is not included in Network Services, proceed to step 2. Otherwise, skip to step 3.

2 If necessary, install [Microsoft TCP/IP Printing].

- ☐ Click [Add].



- ☐ Select [Microsoft TCP/IP Printing] from [Network Service] → click [OK].



- ☐ When the [Windows NT Setup] dialog box appears, insert the Windows NT setup disk or specify the location of the necessary files NT needs to copy → click [Continue].

After the files have been copied, the [Network] dialog box opens.

- ☐ Click [Close].
- ☐ When asked if you want to restart your computer, click [Yes].



NOTE

You must restart Windows NT for the changes to take affect.

3 Install the printer driver. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Driver Guide*.)

When the dialog box for selecting printer management appears, select [My Computer]. Do not select [Network printer server].

The port selection can be changed after installation. You can select any port, such as [LPT1].

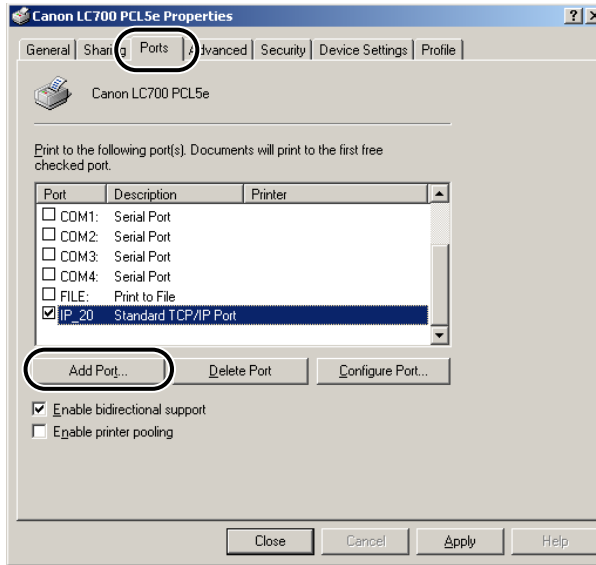
4 Open the printer's Properties dialog box.

- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Right click the printer icon of the printer you installed in step 3.
- ☐ On the pop-up menu, click [Properties].

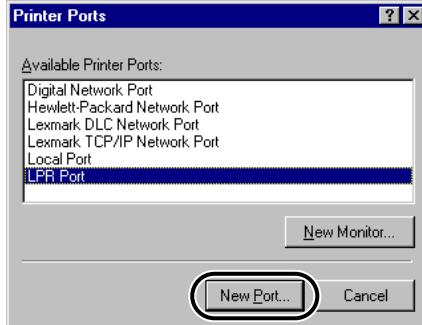


5 Specify the port settings.

- ❑ Click the [Ports] tab to display the [Ports] sheet.
- ❑ Click [Add Port] to open the [Printer Ports] dialog box.

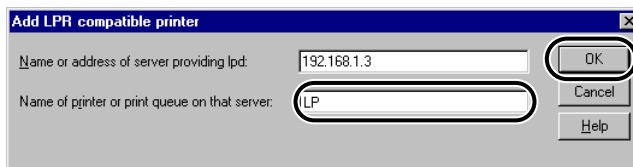


- ❑ From [Available Printer Ports], select [LPR Port] → click [New Port].



The [Add LPR compatible printer] dialog box opens.

- ❑ Enter the IP address or host name of the printer in [Name or address of server providing lpd].
- ❑ Enter "LP" in [Name of printer or print queue on that server] → click [OK].



6 Click [Close] on the [Printer Ports] dialog box.

7 Click [OK] to enable the settings.

The printer driver and location settings are complete.

UNIX

This part describes the procedure for the TCP/IP Network by using UNIX computers.



NOTE

Printing using LPD is explained below. For an explanation of the printing procedure using FTP, see “Printer Management,” on p. 2-42.

1 Log on to a workstation as a superuser.

2 Set up the spooling system.

● **Example using Solaris 1.x**

- ☐ Add the following to the /etc/printcap file:

```
<Print queue name>|<comment>:\n\n    :lp=<device special file>:\n\n    :sd=<spool directory>:\n\n    :rm=<machine IP address or host name>:
```

Input Example:

```
print_queue_name|comments:\n\n    :lp=/var/spool/print_queue_name/.null:\n\n    :sd=/var/spool/print_queue_name:\n\n    :rm=printer_host_name:
```

● Example using Solaris 2.x

- ☐ Start the admintool utility.
- ☐ Select [Browse] → [Printers].
- ☐ Select [Edit] → [Add. Select Access to Printer].
- ☐ In [Printer Name], enter the desired print queue name.
- ☐ In [Print Server], enter the printer host name or IP address.
- ☐ Click [OK].

● Example using Red Hat Linux

- ☐ Start the Printer Configuration utility from the Control Panel.
- ☐ Select [Add] → [Other Unix (lpd) Queue] → click [OK].
- ☐ In [Printer Name], [Remote Host], and [Remote Queue], enter the desired print queue name, print IP address or name, and “LP” for [Remote Queue].
- ☐ To use a filter, select the filter. If there is no appropriate filter for your machine, temporarily select a filter, exit the Printer Configuration utility → change the postscript.cfg file in the spool directory to match your machine. For details, see the ghostscript manual.

● Example using Turbolinux

- ☐ Execute the turboprintcfg command.
- ☐ Select [Add] → [Remote LPD Queue] → click [OK].
- ☐ Enter the desired print queue name → click [Continue].
- ☐ Select [Configure] from [LPD Settings] → enter the machine’s host name or IP address in [Remote Host name], and “LP” in [Remote Queue].
- ☐ Return to the initial screen → click [Save and Exit].
- ☐ If you do not want to use a filter, open the /etc/printcap file → delete one line starting with “:if=” in the added print queue’s section.
- ☐ If you want to use a filter, change the postscript.cfg file in the spool directory to match your machine. For details, see the ghostscript manual.

● Example using HP-UX

- ☐ Start the SAM utility.
- ☐ Select [Printers and Plotters] → [Printers/Plotters] from the menu.
- ☐ Select [Add Remote Printer/Plotter] from the [Actions] menu.
- ☐ Enter the desired print queue name in [Printer Name], and the printer’s host name or IP address in [Remote System Name].
- ☐ Enter “LP” in [Remote Printer Name].
- ☐ Select [Remote Printer] if your computer is running on a BSD System.
- ☐ Click [OK].

● Example using IBM-AIX

- ☐ Start the SMIT utility.
- ☐ Select [Print Spooling] → [Print Queue Addition] → click [Remote].
- ☐ Select [Standard Process Addition].
- ☐ Enter the desired additional print queue name in [Queue Name] and the printer's host name or IP address in [Remote Server Host Name].
- ☐ Enter "LP" in [Remote Server Queue Name].
- ☐ Enter "BSD" in [Remote Server Print Spooler Type].



NOTE

- The admintool utility, SAM utility, and SMIT utility are apart of the operating system you are using. For specific operating instructions, see the appropriate operating system manual.
- The above procedures are only examples. The setup procedures for your system environment may differ.

The host computer settings are complete.

Printer Connection Method (IPP)

To print from a computer using the IPP (Internet Printing Protocol) print application, you must know the printer's IP address to specify the printer's location on the network.

Windows 95/98/Me/2000/XP

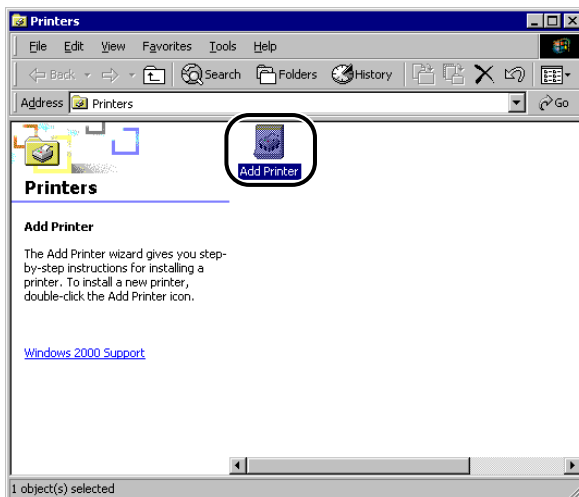


NOTE

For Windows 95/98/Me, install the IPP Client software for Windows 95/98/Me provided by Microsoft, then restart your computer.

1 Start the Add Printer Wizard.

- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Double-click the [Add Printer] icon.



The Add Printer Wizard starts.

2 Enter the URL of your printer.

- ☐ Click [Next].
A dialog box for selecting the location of your printer appears.
- ☐ Select [Network printer] → click [Next].
A dialog box for specifying the network path or queue name appears.
- ☐ If you are using Windows 95/98/Me, enter the network path or queue name in [Network path or queue name] → click [Next] → proceed to the last procedure in step 2.

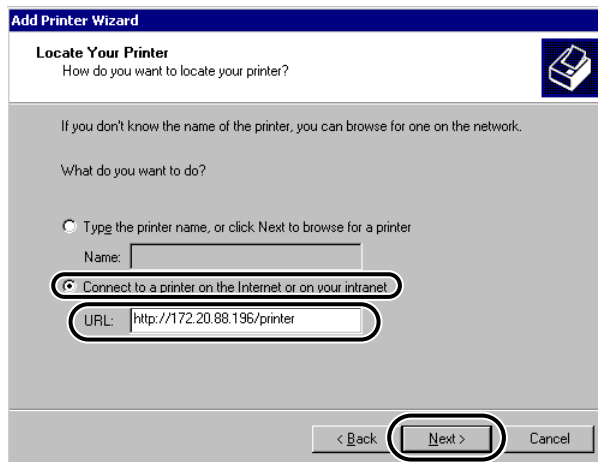


NOTE

You can also click [Browse] to browse for the location of your printer on the network.

- ❑ If you are using Windows 2000, select [Connect to a printer on the Internet or on your intranet] → enter the URL (the IP address of your printer) in [URL] → click [Next].

http://<the machine IP address or printer name>/printer



A dialog box for selecting the printer's manufacturer and printer's name appears.

- ❑ Click [Have Disk] → specify the folder on the CD-ROM that contains the printer driver.

3 Follow the instructions on the screen to complete the installation.

The printer location settings are complete.

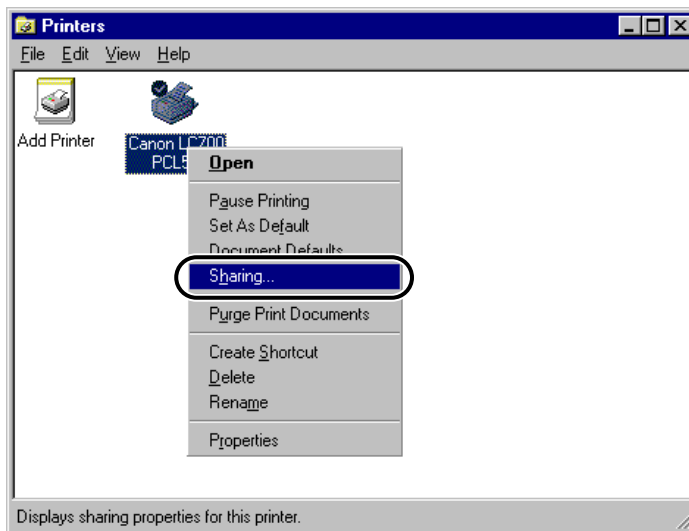
Print Server Settings

If Windows NT or Windows 2000/XP computers are on your network, the following procedure enables you to set up a print server so that you can efficiently manage your network printers. Once a print server is set up, print jobs can be managed by the print server. Also, by setting up an alternate driver for the print server, printer drivers can be installed on each computer via the network.

2

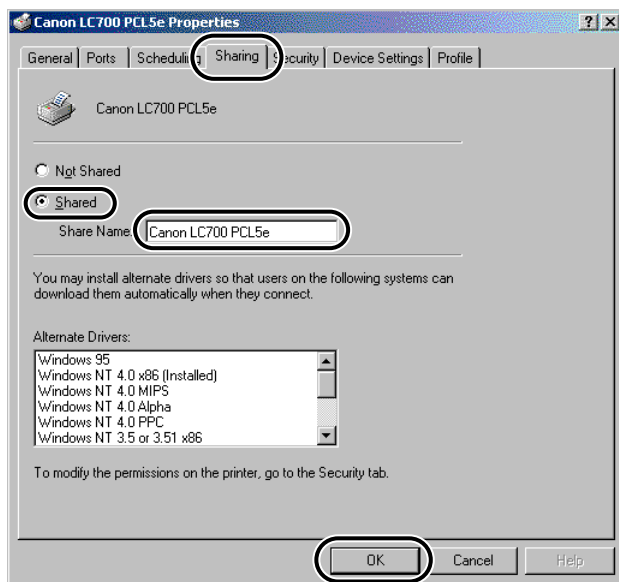
1 From the printer's pop-up menu, display the [Sharing] sheet.

- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Right click the printer icon you want to use for printing and sharing on the network.
- ☐ On the pop-up menu, click [Sharing].



2 Specify the Sharing settings.

- ☐ Click the [Sharing] tab to display the [Sharing] sheet.
- ☐ Select the [Shared] radio button → enter a share name in [Share Name].
- ☐ If you are using Windows NT, select the printer driver you want to install from [Alternate Drivers]. If you are using Windows 2000/XP, click [Additional Drivers] → select the printer driver you want to install.



When the alternate driver is installed, additional windows open for entering the location of the file containing the printer driver. Follow the instructions in these windows.



IMPORTANT

If you are using Windows NT, the use of the alternate driver function requires the installation of Windows NT Service Pack 5 or later.



NOTE

To install the printer driver on another computer, use the Add Printer Wizard window for selecting the printer's location → select [Network printer] → select the shared printer for the computer selected as the print server.

3

Click [OK] on the [Sharing] sheet to enable the shared printer settings.

The shared printer settings are complete.

Printer Management

The machine enables you to use any one of the following software programs to check the machine's status, and to specify settings from your computer.

- NetSpot
- Remote UI (a web browser)
- An FTP client

Using NetSpot

You can use NetSpot to manage various network printers on your computer. For instructions on how to install NetSpot and manage network printers, see the *NetSpot Quick Start Guide*.



NOTE

The *NetSpot Quick Start Guide* is an online manual included on the accompanying CD-ROM provided with the optional Network Kit III. You can use Adobe Acrobat Reader to display and print out the guide for your convenience.

Using the Remote UI

You can use the Remote UI (User Interface) installed in the machine to manage its functions remotely from a web browser.

For instructions on how to start the Remote UI, see step 1 of “Using a Web Browser (Remote UI),” on p. 2-14. For instructions on how to use the Remote UI to manage print functions, see Chapter 2, “Remote UI Functions,” in the *Remote UI Guide*.

Using an FTP Client

To manage printer functions with an FTP client, follow the procedure below. With an FTP client, you can print files from the machine, and upgrade the firmware of the printer's network module.

1 Start up the MS-DOS prompt or the Command prompt.

If you are using UNIX, display the Console screen, and log on as a superuser.

2 Execute the following command.

```
ftp <machine's IP address>
```

3 Enter "root" as the user name.

If a password has been set for the machine, enter the password. If no password has been set, press [ENTER] on the keyboard without entering a password.

You can perform the following operations, and execute the following commands:

Operation	Command
Print a file	put <file name to be printed> PRINTER
Reset the printer's network module	get reset
Acquire the current setting values	get config
Acquire the default setting values	get defaults
Set the printer to file values	put <setting file> CONFIG
Upgrade the firmware	put <firmware image file> FLASH



IMPORTANT

Use the Bindery mode for printing bindery files created with a Windows printer driver.



NOTE

- You can log on using a user name other than "root" (blank, etc.). However, you can only view the config file, but cannot overwrite it.
- You cannot log on to the FTP Client as "Anonymous."

Using a NetWare Network (Windows)

3

CHAPTER

This chapter describes settings and procedures for using the machine with a NetWare network.

NetWare Network Setup Procedures	3-2
NetWare Print Service Settings	3-3
Print Services	3-3
Specifying Print Service Settings Using NetSpot	3-4
Setup Using NetWare Administrator or PCONSOLE	3-4
Protocol Settings	3-9
Using NetSpot	3-9
Using a Web Browser (Remote UI)	3-10
Using an FTP Client	3-10
Setting Up a Computer for Printing	3-11
Connecting to a NetWare Network	3-11
Installing the Printer Driver	3-11
Printer's Location Setting	3-11

NetWare Network Setup Procedures

To use a NetWare network, it is necessary to perform the following procedures.

1**Connect the network cable. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Printer Guide*.)**

Connect the network cables in accordance to the directions specified in the *PCL Printer Guide*.

2**Specify the NetWare print service settings.
(See “NetWare Print Service Settings,” on p. 3-3.)**

Specify the NetWare print service settings, using one of the following methods:

- NetSpot (Canon software provided with the optional Network Kit III)
- NWADMIN or PCONSOLE (Novell software provided with NetWare)

3**Specify the protocol settings. (See “Protocol Settings,” on p. 3-9.)**

Specify the machine's protocol settings on the computer using one of the following methods:

- NetSpot (Canon software provided with the optional Network Kit III)
- Remote UI (a web browser)
- An FTP client

4**Specify the computer settings for printing.
(See “Setting Up a Computer for Printing,” on p. 3-11.)**

Connect each computer you want to use for printing to a NetWare network, and install the printer driver software.

**IMPORTANT**

- It is recommended that the Network Administrator perform steps 1, 2, and 3 above.
- To configure settings with software other than NetSpot, the TCP/IP protocol must be supported by your network environment.
- If you want to print on a NetWare network, disable the banner page. See ‘Using a Web Browser (Remote UI),’ on p.2-14.

NetWare Print Service Settings

To print using a NetWare network, you need to specify the print service settings, which includes the print server and queue settings. You can use any of the software programs listed below to specify the print service settings from your computer. Specify these settings using the easiest method.

- NetSpot (Canon software provided with the optional Network Kit III)
- NWADMIN or PCONSOLE (Novell software provided with NetWare)



IMPORTANT

- To specify the print service settings from NetSpot or NWADMIN, the computer must have Novell Client (NetWare Client by Novell) installed.
- The following procedures explain a sample NetWare setup procedure. Depending on your system environment, the actual setup procedure may be different.

Print Services

Before specifying the print service settings, refer to the information described below to determine the type of print service you are using.



NOTE

- Usually with NetWare 4.x or later, it is recommended that you use the NDS (Novell Directory Services) print service. With NetWare 3.x, it is recommended that you use the Bindery print service. This manual describes procedures for these two print services only.
- With NetWare 5.x, you can use NDPS (Novell Distributed Print Services). If you want to use NDPS, the gateway should be the Novell printer gateway provided with NetWare. This manual does not describe NDPS settings. For NDPS settings, see the NetWare manual.
- NDPS settings are not available for use with NetSpot, use NWADMIN to specify these settings.

■ NDS (Novell Directory Service) and Bindery Mode

This machine supports both NDS and the Bindery print service.

Determine the appropriate mode according to the network environment you are using. (If you are using NetWare 3.x, only the Bindery mode is available.)

■ Queue Server Mode and Remote Printer Mode

This machine supports both the Queue Server mode and Remote Printer mode.

When the machine is used in the Queue Server mode, all print server functions are provided by the machine itself; no other print server hardware or software is needed. However, a separate NetWare user's operating license is required for each machine. In the NDS Queue Server mode (NDS PServer), the NDS print server is used for printing. In the Bindery Queue Server mode (Bindery PServer), the Bindery print server is used for printing.

When the machine is used in the Remote Printer mode, a NetWare print server is required to control the printer. The machine prints using the NDS print server in the NDS Remote Printer mode (NPrinter), and uses the Bindery print server in the Bindery Remote Printer mode (RPrinter).

Specifying Print Service Settings Using NetSpot

You can install NetSpot from the CD-ROM provided with the optional Network Kit III, and use it to specify the print service and protocol settings on the computer you are using.

For instructions on how to install NetSpot and how to specify the print service and protocol settings using NetSpot, see the *NetSpot Quick Start Guide*.



NOTE

The *NetSpot Quick Start Guide* is an online manual included on the accompanying CD-ROM provided with the optional Network Kit III. You can use Adobe Acrobat Reader to display and printout the guide for your convenience.

Setup Using NetWare Administrator or PCONSOLE

Instead of using NetSpot, you can use NetWare Administrator or PCONSOLE to specify the NetWare print service settings.

Using NetWare Administrator in the NDS Queue Server Mode or Remote Printer Mode (NetWare 4.x or Later)

- 1 Log on to NetWare as the Administrator (or equivalent access) → start NetWare Administrator.**
- 2 Execute Quick Setup.**
 - ☐ Select the container for the printer you want to create → on the [Tools] menu, click [Print Services Quick Setup].

3 Specify the Print Server name, Printer, and Queue settings.

- ☐ Enter the print server name in [Print Server name].
To use an existing print server, click the button to the right of [Print Server name] → select the print server from the list box.
- ☐ Under [Printer], enter the printer's name in [Name].
- ☐ From the [Type] window, select the printer's location.
 - If you are using the Queue Server mode, select [Other/Unknown].
 - If you are using the Remote Printer mode, select [Parallel] → click [Communication] to open the [Parallel Communication] dialog box → select [LPT1] from [Port], and [Manual load] under [Connection type]. Under [Interrupts], specify the appropriate setting for your system environment → click [OK] to close the [Parallel Communication] window.
- ☐ Under [Print Queue], enter the queue name in [Name]. In [Volume], enter the volume in which the queue is placed.
To use an existing print server, click the button to the right of [Volume] → select the print server from the list box.
- ☐ Click [Create] → exit NetWare Administrator.



NOTE

- Be sure to remember the name of the print server. You need it to specify the printer's protocol settings.
- If you perform the Quick Setup, the machine automatically allocates printer number zero. If you are using the Queue Server mode, do not change the printer number from zero.

4 If you are using the Remote Printer mode, start the print server.

- ☐ If you are using the NetWare file server as the print server, enter "Load PSERVER.NLM" in the file server on the console screen → press [ENTER] on the keyboard.



NOTE

This step is not required, if you are using the Queue Server mode.

NetWare print service settings are complete. Proceed to "Protocol Settings," on p. 3-9.

Using PCONSOLE in the NDS Queue Server Mode or Remote Printer (Bindery) Mode (NetWare 3.x)

1 Log on to NetWare as the Administrator → start PCONSOLE.

2 If you have not set up a print server, follow the directions below.

- ☐ On the [Available Options] menu, select [Print Server Information] → press [ENTER] on the keyboard.
- ☐ Press [INSERT] on the keyboard.
- ☐ Enter the name of the print server → press [ENTER] on the keyboard.
- ☐ Press [ESC] on the keyboard to return to the [Available Options] menu.



NOTE

- Be sure to remember the name of the print server you are creating. You need it to specify the printer's protocol settings.
- To use the machine in the Queue Server mode in a multiple NetWare server environment, use the same print server name for each NetWare server.

3 Set up a queue → assign the print server to the queue.

- ☐ On the [Available Options] menu, select [Print Queue Information] → press [ENTER] on the keyboard.
- ☐ Press [INSERT] on the keyboard.
- ☐ Enter the name of the queue → press [ENTER] on the keyboard.
- ☐ Select the name of the queue from the existing queue list → press [ENTER] on the keyboard.
- ☐ Select [Queue Servers] → press [ENTER] on the keyboard.
- ☐ Press [INSERT] on the keyboard.
- ☐ Select the print server you set up in step 2 → press [ENTER] on the keyboard.
- ☐ Press [ESC] on the keyboard repeatedly until the [Available Options] menu appears.

4 Assign the printer to the print server.

- ☐ On the [Available Option] menu, select [Print Server Information] → press [ENTER] on the keyboard.
- ☐ Select the print server you set up in step 2 → press [ENTER] on the keyboard.
- ☐ Select [Print Server Configuration] → press [ENTER] on the keyboard.
- ☐ Select [Printer Configuration] → press [ENTER] on the keyboard.
- ☐ From [Configured Printers], select the number of the printer you want to use → press [ENTER] on the keyboard.
- ☐ To use the Queue Server mode, select printer number [0]. In the Remote Printer mode, you can select any desired printer number.

5 Specify the printer name, type, and any remaining items.

- ☐ In [Name], enter the name you want to use for the printer → press [ENTER] on the keyboard.
- ☐ If you are using the Queue Server mode, select [Defined elsewhere] from [Type] window. If you are using the Remote Printer mode → select [Remote Parallel, LPT 1] from the [Type] window.
- ☐ Specify the remaining items → press [ESC] on the keyboard.
- ☐ In the confirmation box that opens, select [Yes] → press [ENTER] on the keyboard.
- ☐ Press [ESC] on the keyboard to return to the [Print Server Configuration] menu.

6 Assign a queue to the printer.

- ☐ Select [Queues Serviced by Printer] → press [ENTER] on the keyboard.
- ☐ Select the name of the printer you set up in step 5 → press [ENTER] on the keyboard.
- ☐ Press [INSERT] on the keyboard.
- ☐ Select the queue you set up in step 3 → press [ENTER] on the keyboard.

7 Press [ESC] on the keyboard repeatedly until the [Exit PCONSOLE] window appears → select [Yes] to quit [PCONSOLE].

8 If you are using the Remote Printer mode, start the print server.

- ☐ If you are using a NetWare file server as the print server, enter “Load PSERVER.NLM (print server name)” on the file server on the console screen → press [ENTER] on the keyboard.
- ☐ If you are using a dedicated print server, enter “PSERVER.EXE” → enter the print server name → press [ENTER] on the keyboard.



NOTE

This step is not required if you are using the Queue Server mode.

NetWare print service settings are complete. Proceed to “Protocol Settings,” on p. 3-9.

Protocol Settings

You can specify the machine's protocol settings on your computer using software. The following software programs can be used to specify the network protocol settings for your machine.

- NetSpot (Canon software provided with the optional Network Kit III)
- Remote UI
- An FTP client



IMPORTANT

- Before you enter the IP address of your machine, contact your Network Administrator to allocate your IP address. Enter the correct IP address to avoid network problems.
- In order to connect to a NetWare network, install the printer driver, or set up the printer's location, the machine's MAC address is necessary. To check the MAC address from the printer's operation panel, follow the procedure below to make a test print.
 1. Press [PRT.Message] → [Go] on the operation panel to take the printer offline.
 2. Press [Menu] until <TEST MENU> appears.
 3. Press [Item] until <PRINT EN CONFIG> appears → press [Enter/Cancel].
- Before you perform the following operations in the next section, make sure that the machine is connected to a power source, and connected to the network.



NOTE

If you change the IP address from the Remote UI, the change will not be reflected on the display of the machine. You can confirm the change of the IP address by selecting <VIEW IP ADDRESS> from the NETWORK SETTINGS menu, or by printing the User's Data List.

Using NetSpot

Instead of using the operation panel of your machine, you can install NetSpot from the CD-ROM provided with the optional Network Kit III, and use it to specify the protocol settings on the computer you are using.

For instructions on how to install NetSpot and how to specify the protocol settings using NetSpot, see the *NetSpot Quick Start Guide*.



NOTE

The *NetSpot Quick Start Guide* is an online manual included on the accompanying CD-ROM provided with the optional Network Kit III. You can use Adobe Acrobat Reader to display and printout the guide for your convenience.

Using a Web Browser (Remote UI)

Instead of using the NetSpot, you can use a web browser (Remote UI) to specify the protocol settings. For detailed procedure, see “Using a Web Browser (Remote UI),” on p. 2-14.

NOTE

To specify the protocol settings using Remote UI from NetWare computers, you can select Frame type. There are four frame types: Ethernet 802.2, Ethernet 802.3, Ethernet II, and Ethernet SNAP.

- 1 Start the web browser → enter the URL below in [Location] or [Address] → press [ENTER] on the keyboard.**
- 2 Select [Administrator Mode] → click [OK].**
 - ☐ Under [Device Manager] in the left column of the screen, click [Network].
 - ☐ Under the Protocols heading, click [Edit] at the right of the TCP/IP protocol box.
 - ☐ Specify the setting method for allocating the IP address of your machine.
- 3 Click [OK].**

Using an FTP Client

You can use an FTP Client to specify the protocol settings. For detailed procedure, see “Using an FTP Client,” on p. 2-20.

- 1 Start up the MS-DOS prompt or the Command prompt.**
- 2 Execute the following command.**

```
ftp <machine's IP address>
```

- ☐ Enter “root” as the user name.
- ☐ Execute the following command to download the config (configuration) file.

```
get config
```

- ☐ Edit the downloaded config file using Notepad (or similar program).
- ☐ Execute the following command to upload the config file.

```
put config CONFIG
```

- ☐ To confirm the settings, execute the following command to reset the print server.

```
get reset
```

Setting Up a Computer for Printing

After you have completed setting the NetWare print service settings and printer protocol settings of the machine, you are ready to set up each computer on the network for printing.

Connecting to a NetWare Network

All computers that use the printer must have NetWare client software installed, and must be enabled for NetWare Network use. For details, see the manuals provided with the operating system.

Installing the Printer Driver

NetSpot is software for specifying printer and network settings. To print from a computer you must install a printer driver. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Driver Guide*.) During the installation procedure, select [Network printer] as the printer’s location, and select the print queue that you created in “NetWare Print Service Settings,” on p. 3-3.

Printer’s Location Setting

To set the printer’s location, follow the procedure below.

NOTE

If you set up the printer’s location when you installed the printer driver, this step is not necessary.

1 Open the printer’s Properties dialog box.

- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Right click the printer icon you want to use for printing.
- ☐ On the pop-up menu, click [Properties].

2 Specify the printer’s location.

- ☐ Click the [Details] tab or the [Port] tab to display the [Details] sheet or the [Port] sheet.

NOTE

The [Port] appears on Windows 2000/XP, and the [Details] appears on Windows 95/98/Me.

- ☐ Set the printer port to the print queue you created in “NetWare Print Service Settings,” on p. 3-3.
- ☐ Click [OK].

Using a NetBIOS Network (Windows 95/98/Me)

4

CHAPTER

This chapter describes the settings and procedures necessary to connect and use the machine with a NetBIOS network.

NetBIOS Network Setup Procedures.	4-2
Setting Up a Computer for Printing	4-3
Connecting to a NetBIOS Network	4-3
Installing the Printer Driver	4-4
Printer's Location Setting	4-4

NetBIOS Network Setup Procedures

To use a NetBIOS network, it is necessary to perform the following procedures.

1

Connect the network cable. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Printer Guide*.)

Connect the network cables in accordance to the directions specified in the *PCL Printer Guide*.

2

**Specify the computer settings for printing.
(See “Setting Up a Computer for Printing,” on p. 4-3.)**

Connect each computer you want to use for printing to a NetBIOS network, and install the printer driver software.



IMPORTANT

- It is recommended that the Network Administrator perform step 1 above.
- The machine does not support NetBIOS over TCP/IP (NetBT). If you are using a TCP/IP network, use the TCP/IP protocol for printing. (See Chapter 2, “Using a TCP/IP Network (Windows/UNIX).”)

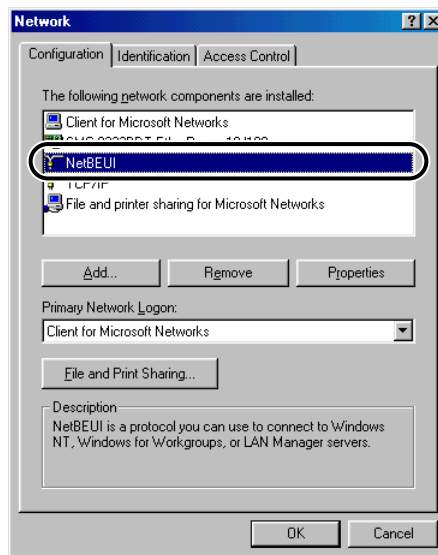
Setting Up a Computer for Printing

After you have connected the network cable, you are ready to set up each computer on your network for printing.

Connecting to a NetBIOS Network

All computers that use the printer must have NetBEUI Client software installed, and must be enabled for use on a NetBIOS network. To check whether NetBEUI Client software is installed, follow the procedure below.

- 1** Right click the [Network Neighborhood] icon on the computer screen → click [Properties].
- 2** Check that [NetBEUI] is in [The following network components are installed].



If NetBEUI is not installed, click [Add] to install NetBEUI Client software.

Installing the Printer Driver

To print from a computer, you must install a printer driver. (See Chapter 1, “Before You Start Using This Machine,” in the *PCL Driver Guide*.) During the installation procedure, select [Local printer]. Do not select [Network printer].

The port selection can be changed after installation. You can select any port, such as [LPT1].

Printer's Location Setting

To set up the printer's location, follow the procedure below.

1 Install the NetBIOS/NetBEUI Port Monitor Utility on the CD-ROM provided with the optional Network Kit III.

- ☐ Insert the CD-ROM supplied with the optional Network Kit III into the CD-ROM drive.
- ☐ Double-click the [My Computer] icon.
- ☐ Right click the CD-ROM drive icon → click [Open] on the pop-up menu.
- ☐ Double-click the [Portmon] folder.
- ☐ Double-click the [Setup.exe] icon.
The install program starts.
- ☐ Follow the on screen instructions to complete the installation of the NetBIOS/NetBEUI Port Monitor Utility software.



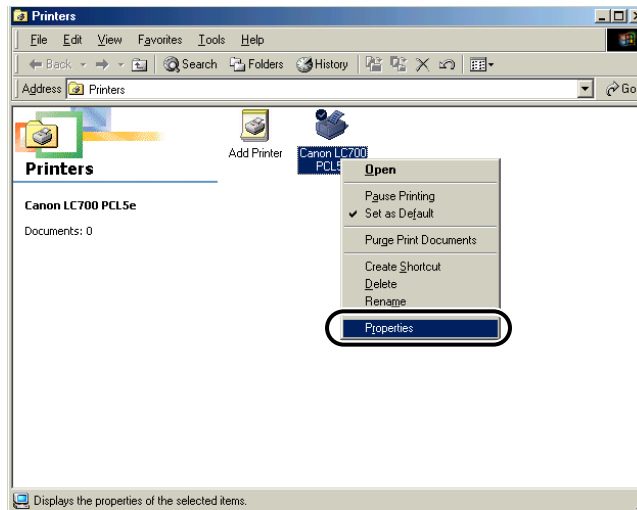
NOTE

Depending on your system environment, the CD-ROM menu may be automatically displayed after you insert the CD-ROM into the CD-ROM drive. In this case, click [End] → proceed to step 2.

2 Open the printer's properties dialog box.

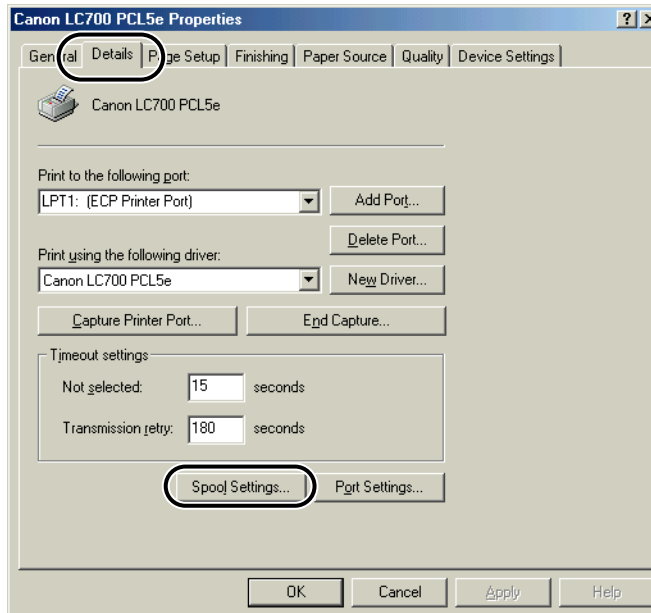
- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Right click the printer icon you want to use for printing.

- ❑ On the pop-up menu, click [Properties].



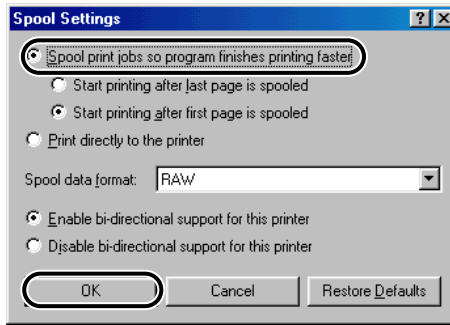
3 Specify the Spool settings.

- ❑ Click the [Details] tab to display the [Details] sheet.
- ❑ Click [Spool Settings] to open the [Spool Settings] dialog box.

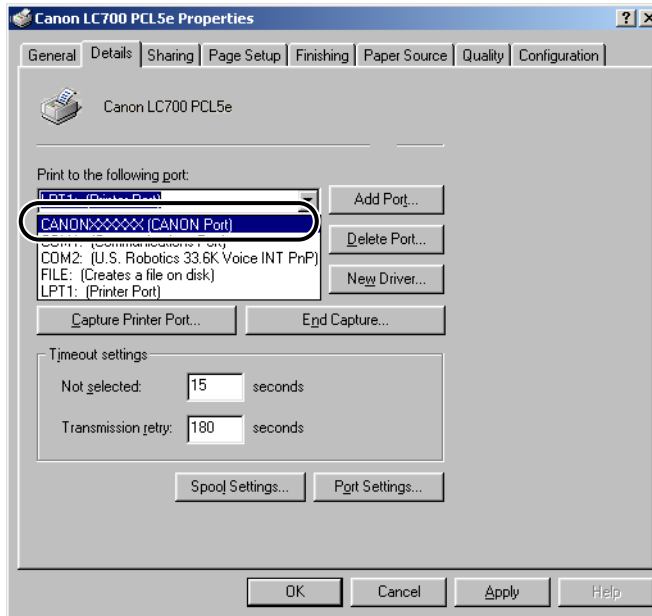


- ❑ Select [Spool print jobs so the program finishes printing faster].

- ❑ Click [OK].



- 4** Select [CANONxxxxxx (CANON Port)] from the Print to the following port drop-down list.



NOTE

- “xxxxxx” is the last six digits of the MAC address of the machine. To check the MAC address from the printer’s operation panel, follow the procedure below to make a test print.
 1. Press [PRT.Message] → [Go] on the operation panel to take the printer offline.
 2. Press [Menu] until <TEST MENU> appears.
 3. Press [Item] until <PRINT EN CONFIG> appears → press [Enter/Cancel].
- If [CANONxxxxxx (CANON Port)] is not displayed in the Print to the following port drop-down list, see “Troubleshooting,” on p. 5-2.

5 Click [OK] to enable the settings.

The printer driver and location settings are complete.

Appendix

5

CHAPTER

This chapter describes how to resolve printing problems, how to uninstall software, an overview of network setting items, the glossary, and index.

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Troubleshooting

This section describes how to resolve basic printing problems.

Unable to Print from a TCP/IP Network

Cause 1 The machine and network cable are not properly connected.

Remedy Check all connections, then restart the machine.
Check that the machine is connected to the network using the proper cable.
(See Chapter 1, “Before You Start Using This Machine,” in the *PCL Printer Guide*.)

Cause 2 The TCP/IP network is not set up properly.

Remedy Confirm that the IP addresses are set up properly. Check if the IP addresses are using DHCP, BOOTP, or RARP, and confirm that these protocols are operating.

Cause 3 The computer that is printing is not set up properly.

Remedy Check the following:

- Confirm that the proper printer driver has been installed. If you are printing from Windows 95/98/Me, each computer must have a printer driver installed. For instructions on installing printer drivers, see Chapter 1, “Before You Start Using This Machine,” in the *PCL Driver Guide*.
- Confirm that the correct printer is set as the output destination for the computer that is printing. In Windows 95/98/Me, confirm the output destination for the printer from the Control Panel or Print Manager.
- If you are using LPD with Windows 95/98/Me, confirm that the spooling settings have been made correctly. (See steps 3 to 5 in “Windows 95/98/Me,” on p. 2-23.)

Cause 4 The name of the file being printed is too long.

Remedy Usually LPR (or the Microsoft TCP/IP Printer, if you are using Windows NT/2000/XP), sends jobs either under the name of the application software used for printing, or the specified file name. However, a job name that is longer than 255 characters, cannot be sent to the printer. To correct this, rename the file with a shorter name.

Cause 1 The machine and network cable are not connected properly.

Remedy Check all connections, then restart the machine.
Check that the machine is connected to the network using the proper cable.
(See Chapter 1, “Before You Start Using This Machine,” in the *PCL Printer Guide*.)

Cause 2 The NetWare network is not set up properly.

Remedy Check the following:

- Confirm that the NetWare file server is running.
- Confirm that there is sufficient disk space on the NetWare file server. Large files cannot be printed if there is insufficient disk space.
- Start NetSpot, NWADMIN, or PCONSOLE, and confirm that the print queue is set up properly and is active.
- Confirm that the network settings of the machine are set correctly. (See “Protocol Settings,” on p. 3-9).
Check the following network settings in particular:
 - A valid frame type is selected from the Frame Type drop-down list. (See “Using a Web Browser (Remote UI),” on p. 2-14.)
 - Print Server Name and Printer Number are correctly specified. (See “Setup Using NetWare Administrator or PCONSOLE,” on p. 3-4.)

Cause 3 The computer that is printing is not set up properly.

Remedy Check the following:

- Confirm that the proper printer driver has been installed. If you are printing from Windows 95/98/Me, each computer must have a printer driver installed. For instructions on installing printer drivers, see Chapter 1, “Before You Start Using This Machine,” in the *PCL Driver Guide*.
- Confirm that the correct printer is set as the output destination for the computer that is printing. In Windows 95/98/Me, confirm the output destination for the printer from the Control Panel or Print Manager.

Cause 4 Data transmission is not possible from the NetWare server to the machine on another subnet.

Remedy When the NetWare server transmits data to the machine, the NCP (Network Control Protocol) Burst Mode is used. But depending on the network environment, the NetWare server may fail to transmit data to a printer on another subnet. In this case, set the NCP Burst Mode of the printer protocol to ‘Off’. The NCP Burst Mode cannot be set using NetSpot; use a web browser or an FTP client to set it. (See “Protocol Settings,” on p. 3-9.)

Unable to Print from a NetBIOS Network or the Printer Port Name is not displayed in the Print to the following port drop-down list.

Cause 1 The machine and network cable are not connected properly.

Remedy Check all connections, then restart the machine.
Check that the machine is connected to the network using the proper cable.
(See Chapter 1, "Before You Start Using This Machine," in the *PCL Printer Guide*.)

Cause 2 The computer that is printing is on a different subnet to the machine.

Remedy The machine uses the NetBEUI protocol for printing, so printing cannot be performed in a network environment with a router between the computer that is printing and the machine. Use a different protocol for printing, or print from the machine without going through the router.

Cause 3 The computer that is printing is not set up properly.

Remedy Check the following:

- Confirm that the proper printer driver is installed in each computer. For instructions on installing printer drivers, see Chapter 1, "Before You Start Using This Machine," in the *PCL Driver Guide*.
- Confirm that the correct printer is set as the output destination for the computer that is printing, and that the spool settings have been set properly. (See "Printer's Location Setting," on p. 3-11).
- In Windows 95/98/Me, confirm the output destination for the printer from the Control Panel or Print Manager.

How to Uninstall Software

To uninstall the LPR Port Utility or NetBIOS/NetBEUI Port Monitor Utility from Windows 95/98/Me, follow the procedures described below.

NOTE

To uninstall NetSpot, see the NetSpot readme.txt file for details.

LPR Port Utility Deletion

1 Set Print Destination Port of the printer driver to a port other than the Canon LPR Port.

- ☐ On the taskbar, click [Start] → point to [Settings] → click [Printers].
- ☐ Right click the printer icon of the printer you installed in step 1.
- ☐ On the pop-up menu, click [Properties].
- ☐ Click the [Details] tab to display the [Details] sheet.
- ☐ Select Canon LPR Port from [Print to the following port], such as <172.20.88.125@LP (Canon LPR Port)>.

2 Insert the CD-ROM supplied with the optional Network Kit III into the CD-ROM drive.

IMPORTANT

Depending on your system environment, the CD-ROM menu may automatically be displayed after you insert the CD-ROM into the CD-ROM drive. In this case, click [Finish] → proceed to step 4.

- 3** Double-click the [My Computer] icon → right click the CD-ROM drive icon → click [Open] on the pop-up menu.
- 4** Double-click the [Lprport] folder → double-click the [UnInstLP.exe] icon → select [Uninstall].
- 5** Follow the instructions on the screen to uninstall the LPR Port Utility.

The software is uninstalled (deleted).

NetBIOS/NetBEUI Port Monitor Utility Deletion

- 1** On the taskbar, click [Start] → point to [Settings] → click [Control Panel].
- 2** Double-click the [Add/Remove Programs] icon.
- 3** Select the software you want to delete from the software list → click [Add/Remove].
- 4** Click [Yes].

A confirmation message is displayed.

The software is uninstalled (deleted).

Overview of Network Setting Items

This section provides an overview of the various network setting items if you use the operation panel, NetSpot, Remote UI, and FTP Client.

Using the Operation Panel

You can change the settings of the machine from the operation panel. Below is a brief overview of the network settings.

■ System Settings

Item	Setting Description	DefaultSetting
Network Settings		
IP Address Auto	FIXED, AUTO (DHCP, BOOTP, RARP: On, Off)	FIXED
IP Address	IP address	192.168.0.215
Subnet Mask	IP address	0.0.0.0
Default Gateway	IP address	0.0.0.0
DNS Server Add.	IP address	0.0.0.0
DNS Dynamic Set	On, Off	OFF
Host Name	Enter the host name of the machine	(null)
Domain Name	Enter the domain name of your network	(null)

Using NetSpot, Remote UI, or FTP Client

You can change the settings of the machine using NetSpot, the Remote UI, or an FTP Client. The setting items you can change are shown below.

NOTE

- The information in parenthesis in the table below is specific to the FTP client. (Example: "Device Name (DEVICE_NAME)" is displayed as the Device Name for NetSpot and Remote UI programs. "DEVICE_NAME" is displayed for the config file of the FTP client.)
- Items with an asterisk cannot be set using NetSpot. Set them using the operation panel on the machine or the Remote UI.

■ Common Settings

Item	Setting Description	Default Setting
Device Name (DEVICE_NAME)	Device name (0 to 32 characters)	(null)
Location (SYS_LOC)	Device installation location (0 to 32 characters)	(null)
Administrator (SYS_CONTACT)	Device administrator name (0 to 32 characters)	(null)
Serviceman (SERVICE_MAN_NAME)	Serviceman's name (0 to 64 characters)	(null)
Telephone Number Of Service Center (SERVICE_TEL)	Telephone number of your local authorized Canon dealer (0 to 64 characters)	(null)
Service Comments (SERVICE_COMMENT)	Comments by service personnel (0 to 64 characters)	(null)
Password (ROOT_PWD)	Device password (0 to 15 characters)	(null)
Permit End User's Job Operation (USER_JOB_CONT)*	Decide whether to permit operating print jobs in the general User mode	Off
Display Language (DISP_LANG)	Default language configuration for web browsing	English
Link (LINK_NAME)*	Link name displayed on support link page of the Remote UI	(null)
URL (LINK_URL)*	URL displayed on support link page of the Remote UI	(null)
Comments (LINK_COMMENT)*	Comments displayed on support link page of the Remote UI	(null)
Download Site Link (DOWNLOAD_SITE_NAME)	The Link name that is displayed on the download site page of the Remote UI	"Download Service"
Download Site URL (DOWNLOAD_SITE_URL)	The URL displayed on the download site page of the Remote UI	http://www.canon.com/download/
Download Site Comments (DOWNLOAD_SITE_COMMENT)	Comments displayed on the download site page of the Remote UI	"Update network firmware"

■ TCP/IP Settings

Item	Setting Description	Default Setting
Frame Type (TCP_FRAME_TYPE)	Frame type used with TCP/IP	Ethernet II
Use DHCP (DHCP_ENB)	Decide whether DHCP is used in setting the IP address	Off
Use BOOTP (BOOTP_ENB)	Decide whether BOOTP is used in setting the IP address	Off
Use RARP (RARP_ENB)	Decide whether RARP is used in setting the IP address	Off
IP address (INT_ADDR)	IP address of the machine	0.0.0.0
Subnet Mask (NET_MASK)	Enter the Subnet Mask	0.0.0.0
Gateway Address (DEF_ROUT)	Enter the Gateway Address	0.0.0.0
LPD Banner (LPD_BANN)	Banner page output method when printing using LPD	Off
IPP URL (IPP_PRT_URI)	URL (1 to 255 characters) when printing using IPP	Printer
Raw Mode Bi-directional (RAW_BIDIR_ENB)	Decide whether bidirectional transmission is supported when printing using Raw	On
DNS Server Address (DNS_ADDR)	IP address of the DNS server	0.0.0.0
DNS Dynamic Update (DDNS_ENB)	Whether the machine is dynamically updated to DNS	Off
DNS Host Name (HOST_NAME)	The host name of the machine	(null)
DNS Domain Name (DOMAIN_NAME)	The domain name for the machine	(null)
TCP Printing Status (TCP_PRT_CONT_ENB)	Enables or Disables TCP printing control	Disable
TCP Printing Control Mode (TCP_PRT_CONT_MODE)	Specify the TCP printing control mode	Permit

■ TCP/IP Settings Continued

Item	Setting Description	Default Setting
Address List for TCP Printing Control (TCP_PRT_CONT_LIST)	Specify the address list for the TCP printing control	(null)
LPD Printing Status (LPD_PRT_ENB)	Enables or Disables LPD printing	Enable
IPP Printing Status (IPP_PRT_ENB)	Enables or Disables IPP printing	Enable
Raw Mode Printing Status (RAW_PRT_ENB)	Enables or Disables Raw mode printing	Enable
SNMP Agent Status (SNMP_ENB)	Specify the SNMP access condition	Enable
Public Community String (SNMP_COM_STR)	Specify the SNMP community string	public

■ NetWare Settings

Item	Setting Description	Default Setting
Frame Type (NW_FRAME_TYPE)	Frame type used for NetWare	802.2
NCP Burst Mode (NCP_BURST_MODE)	Decide whether the NCP burst mode is used (Leave it on normally)	On
Bindery PServer		
Print Server Name (PSERVER_BINDERY_NAME)	The name of the NetWare print server being used	(null)
NetWare Server Name (PSERVER_BINDERY)	The name of the NetWare file server of the NetWare print server	(null)
Polling Interval (BINDERY_JOB_CHECK_DELAY)	Interval for checking a job sent to the printer in the Bindery mode (1 to 15 seconds)	5 seconds
NDS PServer		
Print Server Name (PSERVER_NDS_NAME)	The name of the NetWare print server being used	(null)
NDS Tree (PSERVER_NDS_TREE)	The name of the NDS tree for the NetWare print server	(null)
Context Name (PSERVER_NDS_CONTEXT)	The context Name (1 to 255 characters) of the NetWare print server	(null)
Polling Interval (NDS_JOB_CHECK_DELAY)	Interval for checking a job sent to the printer in the NDS Queue Printer mode (1 to 255 seconds)	5 seconds
RPrinter		
Print Server Name (RPRINTER_PS_NAME)	The name of the NetWare print server being used	(null)
Printer Number (RPRINTER_NO)	The number of printers (0 to 15) that are connected to the NetWare print server	0
NPrinter		
Print Server Name (NPRINTER_PS_NAME)	The name of the NetWare print server being used	(null)
Printer Number (NPRINTER_NO)	The number of printers (0 to 254) that are connected to the NetWare print server	0

■ NetBIOS Settings

Item	Setting Description	Default Setting
Base Protocol (LSLM_ENB)	Protocol used for communication (if NetBIOS is used)	NetBEUI On

Available Software for Network Settings

You can specify the network settings of the machine using the following software:

Item	NetSpot	Web Browser (Remote UI)	FTP Client	ARP/PING Commands	The Machine's Operation Panel
NetWare Protocol Settings (See p. 3-9.)	✓	✓	✓	×	×
TCP/IP Preparation for Protocol Settings (See p. 2-3.)	✓	×	×	✓	✓
TCP/IP Protocol Settings (See p. 2-3.)	✓	✓	✓	×	×
NetBIOS Protocol Settings (See p. 4-3.)	✓	✓	✓	×	×

✓: Available

×: Not Available

Glossary

ARP

The ARP command is used to display or modify the contents of the ARP table. The table is built by the Address Resolution Protocol (ARP), and is used to map IP addresses to Ethernet addresses. To view the contents of the ARP table use the -a command option. Store new entries in the table with the -s option, and delete unwanted entries with -d.

Banding

Specifies the method for the Banding operation performed in the printer driver. As Banding defines the output image data of a page by processing it in rectangular bitmap sections called Bands, you can print a document faster. If [On] is selected, Banding is constantly performed; but if [Auto] is selected, Banding is performed only when necessary.

BOOTP

BOOTstrap Protocol. A protocol that enables a client machine to automatically obtain network setup information from a server over a TCP/IP network. BOOTP enables a client to automatically allocate such information as the host name, domain name, and IP address, so that it is not necessary to enter these items manually.

Buffer size

The size of a data area, or buffer, shared by devices or programs working at different speeds or with different priorities. The buffer is designed to prevent one device or process from being held up by another. For this to be possible, the buffer must be set up correctly.

Container object

An object in the directory tree of a NetWare network which can hold other objects. An organizational unit such as a company department is a container object. This organizational unit can contain objects representing network resources, such as workstations, servers, and printers.

Context

In NetWare, this indicates the location of an object existing in the directory tree.

Cookie

A file left on a user's computer when the user visits a web site. A cookie allows the web site to recognize the user on subsequent visits. Cookies are generally used to enable a user to automatically sign on to certain web sites and to customize the features offered by such sites.

Daemon

A process that runs in the background and performs a specified operation, at predetermined times or in response to certain events. Typical daemons include print spoolers and automated network information system protocols.

DHCP

Dynamic Host Configuration Protocol. A protocol that automatically specifies the network settings of a client on a TCP/IP network. Many of these network settings required to set up TCP/IP, which is the standard protocol of the Internet, can be made automatically.

DNS

Domain Name System. The system that associates the IP address assigned to a computer with the domain name.

DNS server

Domain Name System server. The system that maintains a database that translates the domain names of Internet servers, such as "www.w3.org," into Internet Protocol (IP) addresses, such as "18.176.0.26."

Domain

Management concept that divides large scale networks into groups for identifying individual computers and users. The Internet is managed by classifying domains according to country, type (business, organization, education, etc.), or company.

Ethernet

An industry-standard local area network (LAN) system for connecting together multiple computers. Data is sent from one computer to another by breaking it into packets, and a packet reaches its destination smoothly without any collision with other packets.

File server

A personal computer or workstation to which two or more users on client personal computers can gain access via a local area network (LAN) in order to share and use its hard disk drive.

Frame type

The packet format that the network adapter of a computer uses to communicate over a network. On an Ethernet network, there are four frame types: Ethernet 802.2, Ethernet 802.3, Ethernet II, and Ethernet SNAP.

FTP

File Transfer Protocol. A client-server protocol enabling a user to transfer files on one computer to and from another computer over a TCP/IP network. The File Transfer Protocol also governs the client program with which the user transfers files.

Gateway Address

The default address of a network or Web site. It provides a single domain name and point of entry to the site.

HP-GL/2

A graphics language that allows computer applications to draw graphic images using printers. Images in HP-GL/2 are represented as vector graphics. Vector objects describe an image in terms of geometric shapes, such as lines and polygons, and fills. HP-GL/2 is supported by your Canon machine.

HTTP

Hypertext Transfer Protocol. The client-server TCP/IP protocol used on the World Wide Web for the transfer of HTML (Hypertext Markup Language) documents across the Internet.

Internet Protocol (IP)

The underlying set of networking rules that describes how data is transmitted across the Internet. Internet Protocol allows data from one computer to be split into packets, and sent to another computer with a specific IP address.

IP address

Internet Protocol address. A 32-bit numeric address used by IP (internet protocol) to specify a computer on the Internet. The IP address is usually written as four numbers delimited by periods. An example is 128.121.4.5.

IPP

Internet Printing Protocol. A protocol used between a client and a print server for carrying out remote printing over the Internet.

LAA

Locally Administered Address. When a device is powered ON, its network address is presented to the network. The default network address assigned by the manufacturer at the time of production is known as the Universally Administered Address (UAA), while an address specified by the network administrator to override the UAA is the Locally Administered Address (LAA). Each LAA must be unique on a Local Area Network.

LAN

Local Area Network. It is a network system formed by linking a server, workstations, and computers, which are all located in the same building or some other relatively limited area.

Log on

Entering a user name and password as a means of user authentication to start a computer session or access to a service.

LPD

Line Printer Daemon. A daemon is a program that runs, without human intervention, to accomplish a given task. The Line Printer Daemon controls the flow of print jobs to a printer.

MAC address

Media Access Control address. The hardware address of the network adapter of a computer connected to a local area network.

NCP Burst Mode

Aids in the transmitting of TCP/IP packets between a personal computer and the Internet in a Point-to-Point Protocol. Its main function is to negotiate the network-layer details related to the transmission.

NDS (Novell Directory Services)

A feature introduced in Novell NetWare 4.0 that provides access to directories that may be located on one or more servers.

NetBEUI

NetBIOS Enhanced User Interface. NetBEUI is a network protocol originally designed by IBM and later extended by Microsoft and Novell. In a small network, NetBEUI is more efficient than other protocols, such as TCP/IP. It is supported by IBM operating systems and Microsoft Windows to provide services such as file sharing and printing.

NetBIOS

Network Basic Input Output System. A program that allows applications on different computers to communicate within a local area network (LAN). NetBIOS is used in Ethernet, Token Ring, and Windows NT networks.

NetWare

Novell NetWare. Novell Inc.'s client-server network operating system for the IBM PC. NetWare uses the IPX/SPX, NetBEUI, or TCP/IP network protocols. NetWare supports MS-DOS, Microsoft Windows, OS/2, and Macintosh clients. NetWare for Unix gives users access to Unix hosts.

OS/2

A family of multitasking operating systems developed by IBM for Intel x86-based computers. OS/2 provides both a graphic user interface similar to Windows as well as a command line interface similar to DOS. Add-ons to OS/2 allow it to run DOS and Windows applications.

Packet Signature

Encrypted signatures used when exchanging data packets to guarantee that a packet really came from the computer that it claims to have come from. Packet Signature is designed to prevent packet forgery and unauthorized Supervisor access to a NetWare server.

PING

The PING command is used to test basic connectivity. By default, the Windows 95 version of PING sends four packets that are each 32 bytes long. Four packets are enough to prove connectivity. To send a different number of packets, specify the number with the `-n` command line argument. Send packets of a different length with the `-l` argument. For example, the command `ping -n 10 -l 1002 peanut.nuts.com` sends ten packets that are each 1002 bytes long.

Protocol

A set of rules that govern the transmission of data across a network. Examples of protocols are FTP, DHCP, BOOTP, RARP, IPP, and TCP/IP.

Proxy server

A server that provides a cache of files available on remote servers that are slow or expensive to access. The term “proxy server” normally refers to a World Wide Web server that, on receiving a URL, tries to supply the requested file from its cache. If it cannot locate the file there, the proxy server would bring it from the remote server and also save a copy in its cache so that the next request can be obtained locally.

Queue Server mode

When the printer is used in NetWare’s queue server mode, all print server functions are provided by the printer itself, and no other print server hardware or software is required.

RARP

Reverse Address Resolution Protocol. A protocol that associates a network adapter address (MAC address) with an Internet Protocol (IP) address.

Raster

Raster graphics describes an image as a pattern of dots, compared to vector graphics which represents an image as a geometrical formula. Each row of color dots in the mosaic of color dots constitutes one raster graphic. In a printer, a raster graphic is used as the master image from which a page is printed, because the image can be transferred to paper by printing one raster at a time.

Raw

This is a print application used with Windows 2000/XP. It can print at higher speeds than LPD.

RIP (Raster Image Processor)

The hardware and/or software functions of a printer that convert vector graphic descriptions from a computer into raster graphic images that can be printed.

Scope ID

The Scope ID is a character string value that is appended to the NetBIOS name, and is used for all NetBIOS over TCP/IP communications. It provides a way for a computer to communicate only with others sharing the same Scope ID.

SMB

Server Message Block. A protocol that provides file and printer sharing over a network for Windows computers.

SNMP (Simple Network Management Protocol)

The network management protocol of TCP/IP. Agents, which can be hardware or software, monitor the activity of various devices on the network and report to the network console workstation. The information received about each device is maintained in a structure known as a management information block.

Source Routing

Normally, a host has no control over the route taken by a packet it sends. Source routing is a technique whereby the sender of a packet can specify the route that a packet should take through the network to its destination.

Spooling

Simultaneous Peripheral Operations On-Line. Spooling means putting jobs in a buffer, which is a special area in memory or on a disk. Because devices access data at different rates, the buffer provides a waiting station where the data can wait until the device for which it is meant is ready to access it.

Subnet Mask

SUBNETwork mask. The method used to determine which subgroup, or subnet, an IP address belongs to on TCP/IP networks, all devices whose IP addresses have the same prefix would belong to the same subnet. Dividing a network into subnets is useful for both security and performance reasons.

Switching hub

A network connection box to which a number of computers can be connected. The switching hub forwards a data packet from the network to the appropriate computer according to the packet's address. Conventional hubs simply send every packet to every connected computer. Since a switching hub forwards packets only to their intended recipients, it provides greater efficiency.

TCP/IP

Acronym for Transmission Control Protocol/Internet Protocol. The protocol used to connect to the Internet and to wide area networks.

UAA

Universally Administered Address. (See definition for LAA).

URL

Uniform Resource Locator. A standard way of specifying the location of an object, usually a web page, on the Internet. The URL for a web page would look something like this: “http://www.w3.org/default.html”. Here, “http:” indicates that a web page is being accessed, “http://www.w3.org” is the address of the server containing the web page, and “default.html” is the file name under which the web page is stored on the server.

Vector Graphics

(See definition for Raster.)

WAN

Wide Area Network. A geographically widespread network that relies on communications capabilities to link the various network segments.

WINS

Windows Internet Name Service. A service for associating a NetBIOS name, which is a computer name or printer name on a NetBIOS network, with an IP address. To use WINS, a WINS server is required.

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